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The OIL WEEKLY

July 31, 1925 2685 10 Cents A Copy

SWAN UNDERREAMER

The Service It Gives
Is Far Beyond
Its Cost

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THE BRIDGEPORT MACHINE COMPANY

General Offices and Works WICHITA, KANSAS

"OILWELL" ECCENTRIC TONGS

for Jerk Line *or* Rotary Work

Simplest, Sturdiest, Most Positive Tongs Made.

ADJUSTABLE-BALANCED

THE Bit Liners are cam shaped, moving forward and in as the Handle moves forward—this forces the three tool-steel Bits to grip slowly, smoothly and positively, without crushing effect.

By using one set of Jaws, and one Handle, a number of different sizes of pipe, casing and tool joints can be operated by merely bushing the Jaws with the proper Plain and Bit Liners.

"OILWELL" Tongs are accident proof—No hooks, catches, or automatic locks are used. Once the Locking Pin is inserted, the Jaws cannot be opened until the pin is removed.

"OILWELL" Tongs are self-balancing—the Suspension Strap is so mounted that the Tongs balance perfectly whether Jaws are open or closed. Tongs are made of electric steel throughout.

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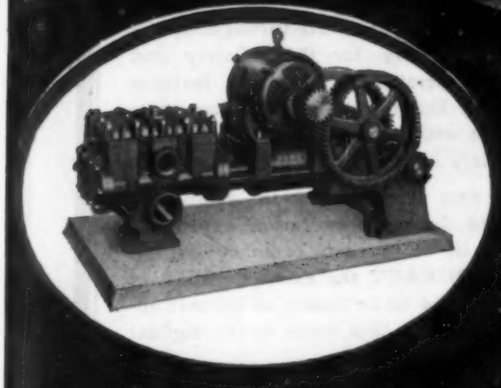
WORLD'S OLDEST AND LARGEST MANUFACTURERS OF OIL FIELD EQUIPMENT

THE OIL WEEKLY. Issued weekly by the Gulf Publishing Co., 1716 Dallas Ave., Houston, Texas. Subscription price $1.00 per year; 10 cents per copy. Entered as second-class mail matter December 23, 1916, at the post office at Houston, Texas, under act of March 3, 1879.

HEADQUARTERS for Motorized Pumps



The growing trend toward electrification of pumping equipment is reflected in the constantly increasing demand for Gaso Motorized Pumps. The Midwest Refining Co., Manhattan Pipe Line Co., Humble Pipe Line Co., Mutual Oil Co., Shaffer Oil & Refining Co. and Pierce Petroleum Co. are a few of those we have recently served in this connection. Having made a thorough study of motor-driven pumps, we know the conditions that have to be met.

Write for prices and details of electrically operated pump equipment.

GASO PUMP & BURNER MFG. CO. • *Tulsa, Okla.*

GASO PUMPS

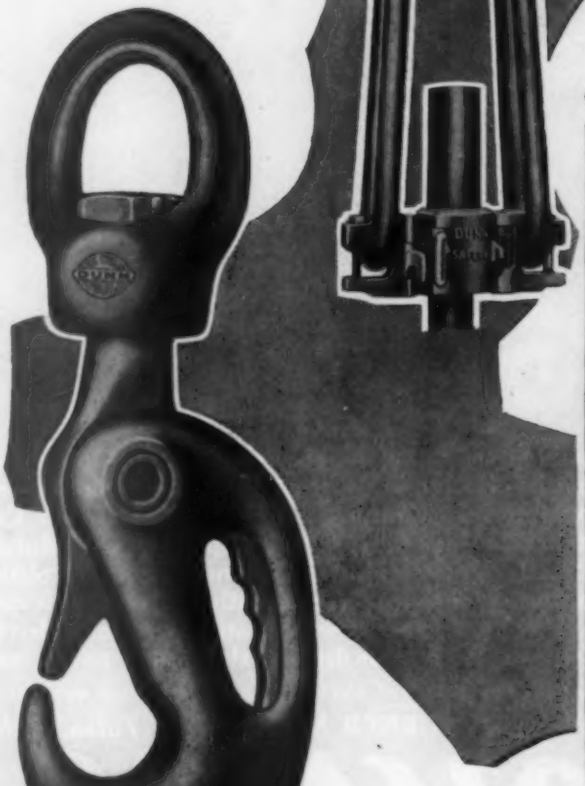
for every oil and gas service

3 new DUNN Safety TOOLS

OIL WELL DUNN TOOLS

DUNN SAFETY TONG ("SMITH TONG" Type)

DUNN SAFETY ELEVATOR



DUNN SAFETY AUTOMATIC SPRING HOOK

Embracing Maximum Safety and Speed in Operation

All Dunn Tools are noted throughout the petroleum industry for their Safety and Speed in Operation. They are features which every Dunn Tool must possess .... the factors which make Dunn Tools inevitable leaders in their particular class.

In these new Dunn Tools, the factors of Safety and Speed in operation have been embodied in more than ordinary degree. They are IN FACT the exemplification of many years (14 to be exact) of earnest endeavor to achieve this result to the highest possible extent.

Write for descriptive folders

Dunn Mfg. Co.

OXNARD, CALIFORNIA

Announcing the New Cast Steel Drilling Valve

A VALVE that combines all the advantageous features of the standard Darling Gate Valves plus extreme lightness and unusual strength.

Check over its numerous fine points and see if we have left room for a single practical improvement.

1. Cast steel frame of great tensile strength.
2. Discs of forged steel or forged steel bronze-faced that seat in a new clean position at each operation. Equal wearing—long lived.
3. Renewable seat rings concealed into body of valve so as to clear pipe and tools.
4. Guide rings, cast integral with body that protect and guide casing and tools.
5. Clearance through seats is practically two inches greater than inside diameter of pipe or casing.
6. High tensile steel body flange bolts and nuts.

Your request will bring drawings and further details of this improved drilling valve.

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Petroleum Equipment Company, Los Angeles

DARLING
GATE VALVES

Say you saw it in The Oil Weekly

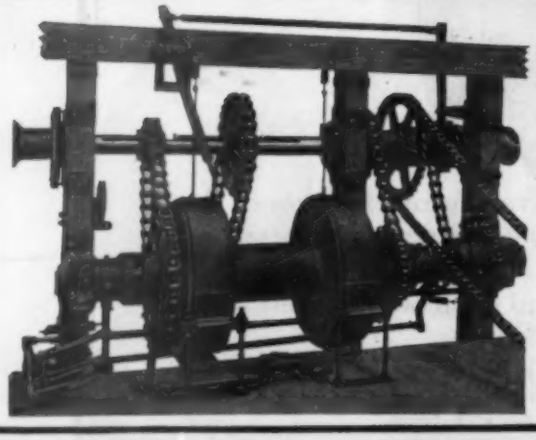
LUCEY ROTARY

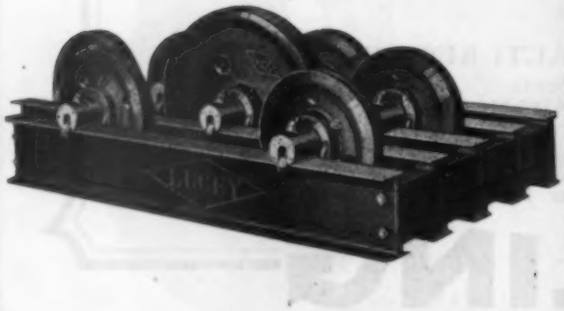
WHEREVER

THE NAME LUC GUARAN

The Lucey equipment featured on these two pages marks a real advance in the design and construction of rotary outfits.

Lucey Engineers,—men with years of experience in designing and building oil field machinery have more than kept pace with modern drilling methods, and have re-designed and constantly improved their products until today they are regarded as the standard of rotary construction wherever oil is drilled.





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CHATTANO

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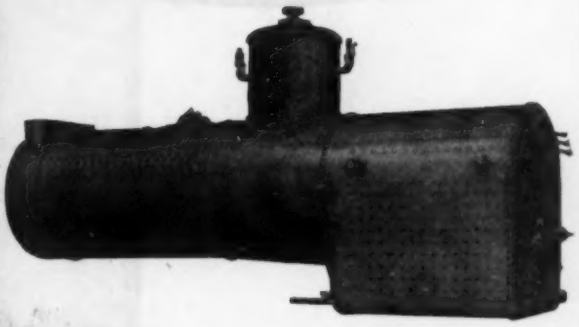
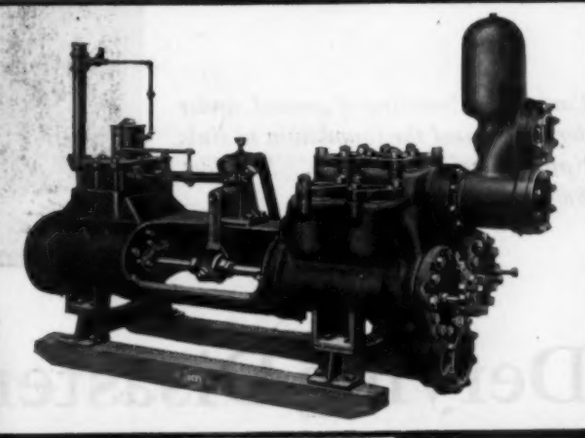
DRILLING OUTFITS

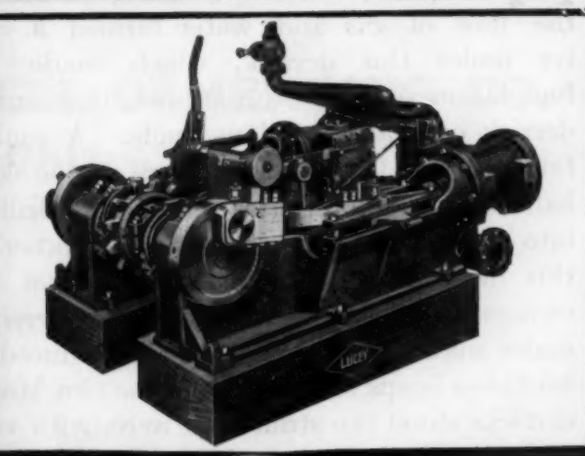
EY THERE'S OIL

All Lucey equipment is "built in the shops that developed the Rotary" and is carefully inspected and tested before shipment.

Before you buy any Rotary Machinery investigate the advantages of the Lucey design, —compare the performance of the Lucey Equipment with other similar machinery,— then decide.







RING CORPORATION
AND PLANT
OGA, TENN.

"Branches in all active Oil Fields."

Say you saw it in The Oil Weekly

MOORE
TUBULAR STEEL
DERRICKS

Cave-in or Cratering of ground under derrick caused the foundation to sink, tipping derrick as shown. Norphlet, Smackover Field, Ark.

Defying Disaster on Hell's Half Acre

AFTER drilling into the deep sand at Norphlet, Smackover field, Arkansas, the flow of gas and water formed a crater under this derrick, which made the foundation sink into the ground, tipping the derrick over at a perilous angle. A similar fate overtook the same operators, on the same half acre of ground, after successfully drilling into the deep sand with a twin brother of this derrick. To the astonishment of the owners, who had witnessed other derricks under similar circumstances being reduced to worthless heaps of wreckage, these two Moore derricks stood the strain and were, with very little loss, salvaged for use elsewhere.

An army of over 300 Moore derricks are already in use in the Smackover field, and more are being added daily. Through every emergency in the spectacular new developments in this field, the Moore derricks have fully justified the confidence placed in them by their owners.

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Pittsburgh, Pa.
Established 1907

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Skilled Labor

HALLIBURTON OIL WELL CEMENTING CO.
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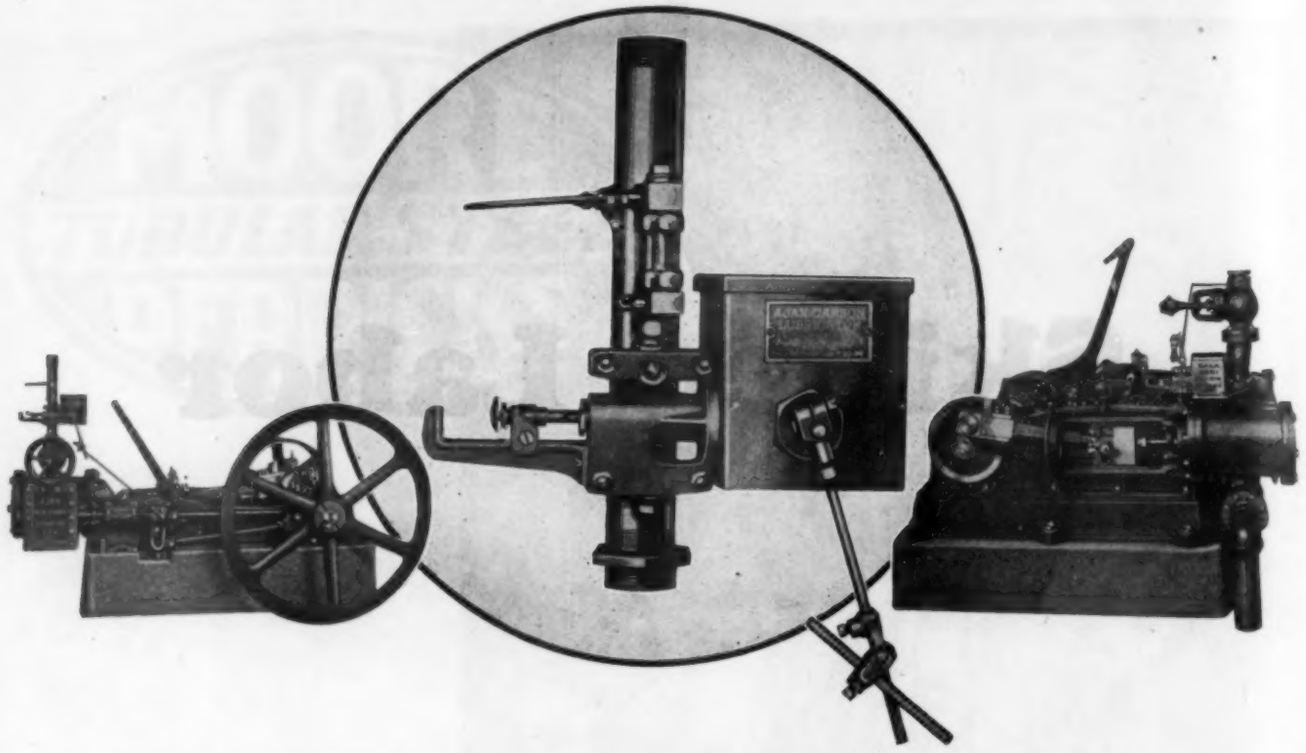

The Watchman of Your Engine

You know that all you need to do to an Ajax Engine to make it run is to give it steam and oil. The best way to give it oil is with Ajax-Carson force feed and sight feed lubricator. There are no valves or delicate mechanisms to get out of order. You see the oil after it has been pumped, as it goes to do its work. It regulates itself according to the engine speed and watches for you the proper lubrication of your engine.

Made by

AJAX IRON WORKS

Corry, Pa.

Distributed by

NATIONAL SUPPLY COMPANIES

In every oil field

34137

AJAX ENGINES

"Reg. U. S. Pat. Off."

AJAX

AJAX ENGINES

"Reg. U. S. Pat. Off."

Note What This "Farm Boss" Says

A Kansas "Farm Boss" has reported on a set of HEWITTS he used for over a year. He states they were not off the lease the entire time except perhaps once or twice a week when it was necessary to drive to town. These tires were subjected to running over rocks, ruts, mud, lead and rod lines, day in and day out for over a year. The user considered they gave "remarkable" service.

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There Is No Better"

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put "life-time" bearings in your sand reel uprights

The STITZINGER UNIVERSAL BEARING for sand reels

Lorraine

Automatic Gas and Oil Separators
Tibbetts Rod Rack
"Mak-Shur" Cement Barrel
Stitzinger Universal Bearing for Sand Reels
B & M Stuffing Boxes
Lorraine Relief Valve
Lorraine Two-Way Valve

Send for the Lorraine Catalog.

This sand reel bearing will outwear the ordinary kind from ten to twenty times. It is good for the average life of your rig. It permits free movement of the sand reel shaft in all directions, and to any extent, without the slightest strain on bearings, reel, or uprights. Only the highest grades of materials are used in its construction and a sufficient number of oil holes and oil grooves provided to insure ample and perfect lubrication. Easily installed or taken out, and requires no care other than ordinary lubrication.

LORRAINE

The Lorraine Corporation

110th and Alameda Streets, Los Angeles, Calif.

Mid-Continent Distributors:
The Crowell Company, 406 W. First St., Tulsa, Oklahoma.

Export Distributors:
Buck & Stoddard, 30 Church St., New York City.

Texas Weather soon proves cheap pipe is the most expensive

THE above photograph taken in the Humble Fields shows a typical example of what to expect from common pipe when exposed to Texas elements. A useless shell of crumbling rust, grown old long before its time — out of service without even paying for itself in useful work.

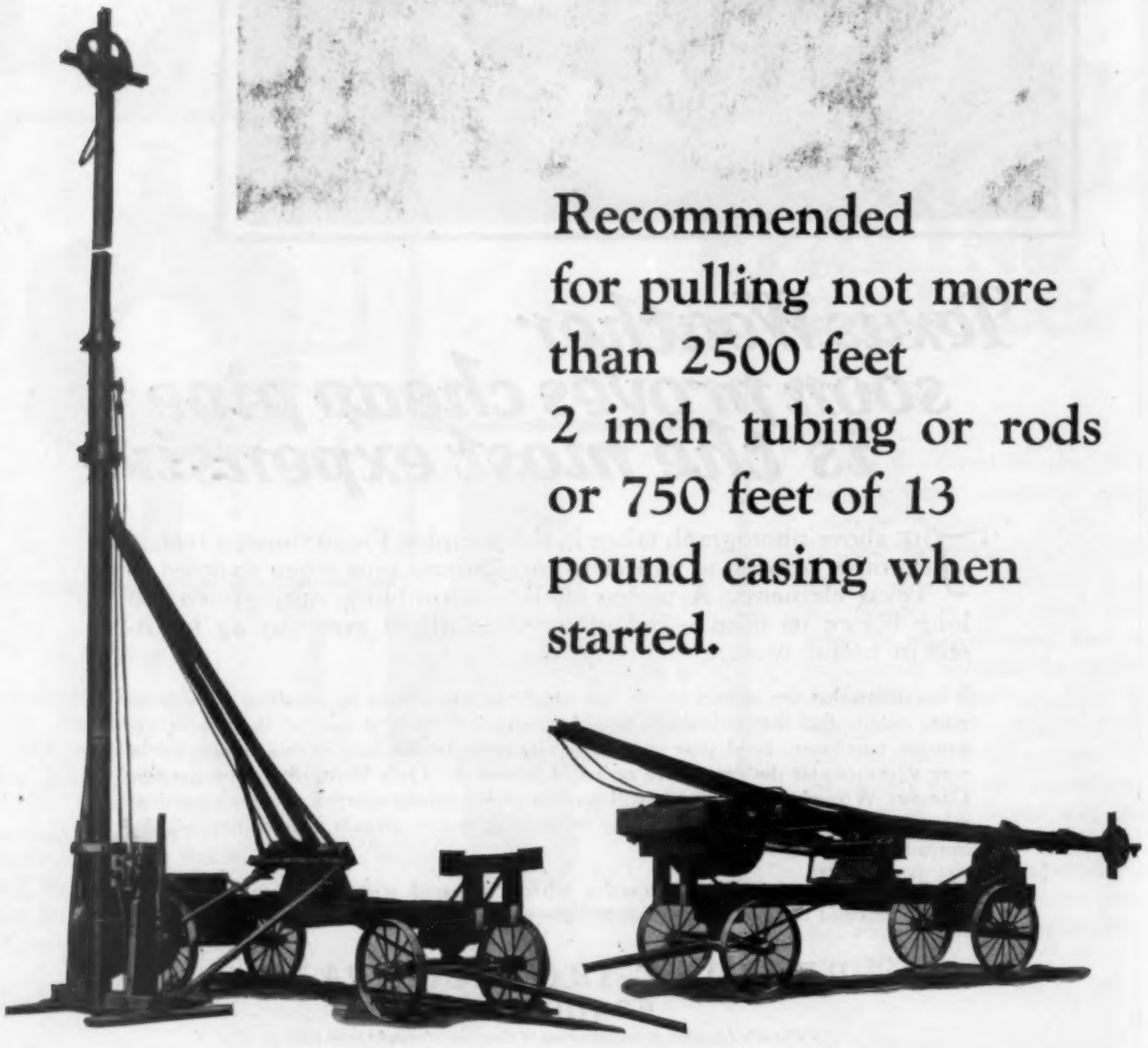
It is evident that the owners of this line sought to save money by installing a low price pipe, only to find that its inability to resist corrosion made it one of their most expensive purchases. Steel pipe cannot be expected to last long in this service, for its very structure aids the destructive action of corrosion. Only Wrought Iron—Reading Genuine Wrought Iron Pipe — will prove a real economy where corrosive conditions are severe. Reading's natural ability — to resist rust — gives it a life of two to three times that of the best steel pipe.

While its price might seem excessive when compared with steel pipe, no one has ever questioned the low *ultimate cost* of "the pipe that endures."

READING IRON COMPANY
READING, PA.
World's Largest Manufacturers of Genuine Wrought Iron Pipe
OIL WELL SUPPLY COMPANY, Distributors
Inquire at any of their 100 branches

READING PIPE
GENUINE WROUGHT IRON

NATIONAL
PULLING MACHINE



Recommended for pulling not more than 2500 feet 2 inch tubing or rods or 750 feet of 13 pound casing when started.

THE NATIONAL SUPPLY COMPANIES

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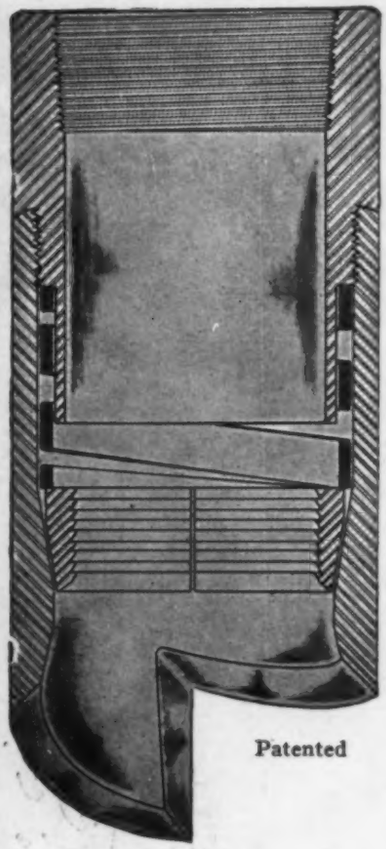
The Only Rock Bit

with

YOUR BEST BET ON A FISHING Job!



Patented

The LE BUS Slip Socket Overshot

—developed by engineers to the highest point of efficiency coupled with greatest simplicity of design and foolproof construction.

Equipped with slips for fishing for all sizes of plain pipe or tool joints and collars.

All Forged Steel

QUICK SERVICE
ANY PLACE
ANY TIME

LE BUS
PATENTED
OIL WELL
TOOLS

LeBUS Automatic Cathead
LeBUS Slipsocket Overshot
LeBUS Eureka Tongs
LeBUS Breakdown Post
LeBUS Bottom Hole Plug
LeBUS Outside Drill Pipe Cutter
LeBUS Inside Pipe or Casing Cutter

AT YOUR DEALERS

MANUFACTURED BY THE

LE BUS
ROTARY TOOL WORKS

ELECTRA, TEXAS

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ECONOMICAL

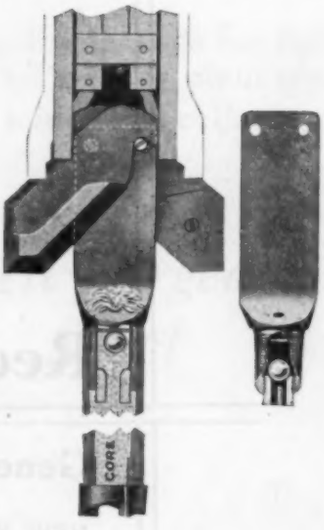
By using the Standard Collapsible Rotary Drill and Core Barrel you can have sharp cutters at bottom of the hole practically all the time.

When the cutters become dull the drill is quickly brought to the surface by a cable lowered down through the drill stem, the dull cutters replaced with sharp bits and returned in from ten to twenty minutes, depending upon depth of the hole.

To obtain a core it is only necessary to withdraw the drill in the same manner, fasten the core barrel to bottom of the drill and lower it again, when a few revolutions of the rotary will fill the barrel, ready to be withdrawn and emptied on the derrick floor.

Are the hours saved in changing bits, obtaining cores, preventing boulders from falling into the hole, bridging over and securing a straight hole important considerations to you?

These advantages can be fully secured by using the Standard Collapsible Rotary Drill and Core Barrel.



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Transit Pumps
WAITLOCK GUARANTEED CORDAGE
Warren Steam Engines

Something New from Something Old

IT IS NOT likely you would find an Oil Man in America who would fail to tell you, if asked, that the Reid Band Wheel Power is standard of the world. And here in America where we are so much more inclined than our British brothers to be off with the old and on with the new, that means volumes.

And so when the time came for the Joseph Reid Gas Engine Company to make an underpull geared power for use where the work was not heavy enough to justify a Reid Band Wheel Power, there was a certain distaste in the thought of coming out with something new, something essentially experimental.

It is characteristic of the Reid folks that they didn't do that. In thinking the subject through it became apparent to their engineers that base, shaft and eccentrics could be the same as in the Reid Band Wheel Power. And as evidence of the fact that there is nothing experimental in the Reid Type PG Underpull Geared Power, if the owner finds he has more wells to pump than this power can easily handle, it can be converted into a band wheel power by substituting the band wheel for the gear.

Which is just another way of saying that there is reserve power beyond words in this Reid Underpull Geared Power.

We maintain a machinery department to install Powers, Engines, Jacks, boiler houses, tank houses and other surface equipment. Our experienced construction crews are at your service always. Estimates or quotations can be had at any time, without obligation, on complete equipment for handling any combination of wells, anywhere.

Write our Tulsa office for catalogs and information, or see the boys at the Frick-Reid Store in your field.

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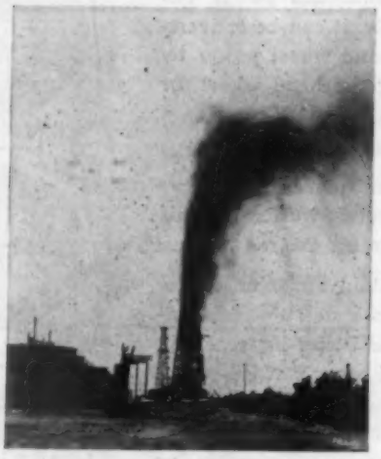
In Oil Field Equipment — the most HUMAN Organization in America

Designers and Manufacturers of Quality Oil Well Equipment

Conserve the Pressure in Your Wells

Don't dissipate the resources of your wells. Keep the pressure in the well by maintaining control at all times. You can prevent disastrous blowouts and drill with safety when you

Install the Regan Casing Control Head

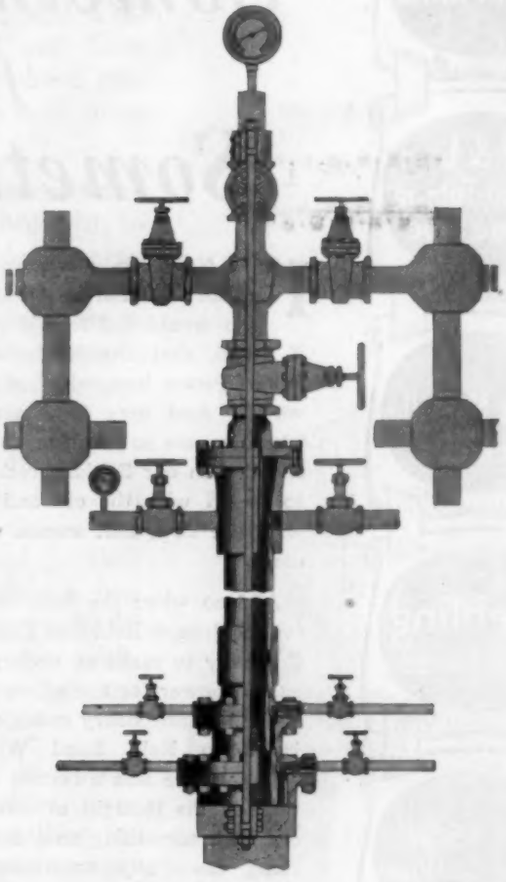


Don't let this happen!

A simple device for tying the strings of casing together and preventing leakage.

Made in three types to meet every need.

Ask for Regan's Catalog.



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New York Office: Woolworth Bldg., 233 Broadway, Wm. Braat, Manager.

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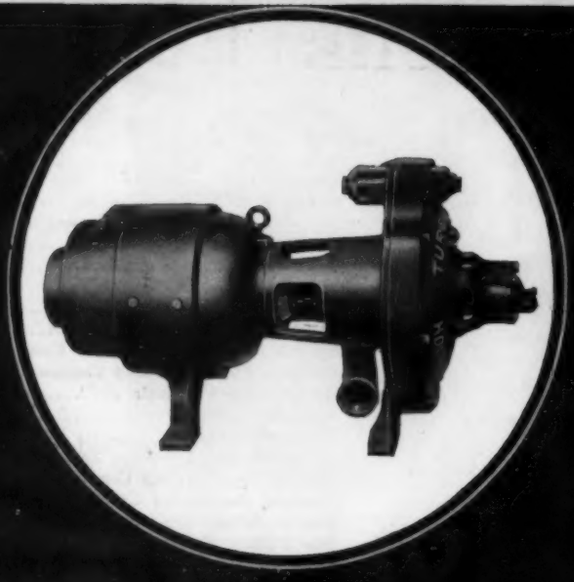
Turbo~Generators



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Dependable

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Houston Pump & Supply Company
Houston, Texas
Sold by Dealers Everywhere

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Modern Equipment in Foreign Fields.
An electrical installation at Baku, Russia

The OIL WEEKLY

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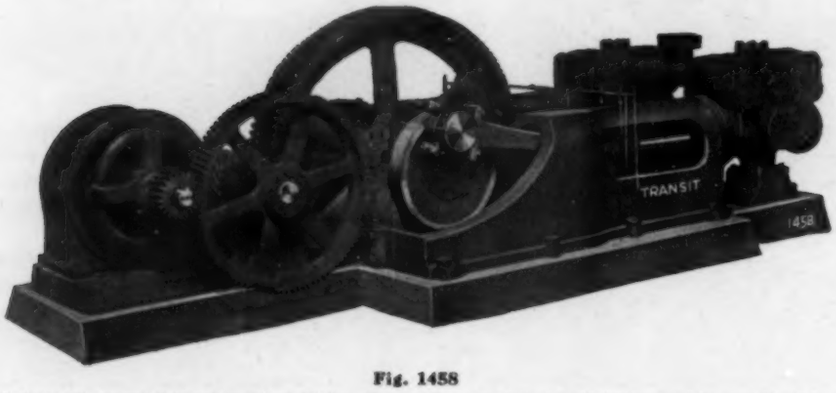

Fig. 1458

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(A New Bulletin 107-A on "Block Valve Pumps" on Request)

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Continued Production Decline Holding Crude Market Firm

Weakness of gasoline market holding back runs to stills; California crude shaky

By J. Kent Ridley,
Staff Representative

WITH all districts except California participating in the loss, the downward trend of production in the United States is the most encouraging feature of the market for crude oil. Failure of the gasoline market to hold the strength recovered following the advances made by the Prairie Oil & Gas Company a short time back has created a disposition among Mid-Continent refiners to curtail their runs to stills rather than endanger a market which is not strong as a result of the buyers, both domestic and export, holding off their purchases in hopes of securing their requirements at still lower prices.

Continued reaction of wholesale prices on gasoline during the past seven day period with both domestic and export buyers holding back on contemplated purchases pending the outcome of the present unsettled gasoline market has caused a number of refiners to voluntarily curtail their crude runs to stills. That a general reduction in crude charges to stills will be necessary to restore the gasoline market to a stable condition became aparent to refiners early this week when price quotations on U. S. motor grade gasoline failed to stimulate interest of jobbers at 12¼ cents, or three-quarters of a cent under the figure reached several weeks ago when light grades of crude were boosted to new high levels for the year. This slackened demand and decreased revenue from gasoline is bringing pressure to bear on the refiners to such an extent that an immediate curtailment of crude runs is necessary to right the situation.

Crude Market Firm

However the continued decline of light oil production is holding the Mid-Continent crude market firm, and the one weak spot is in California where producers are basing their hopes upon the remote possibility of another increase in the Mid-Continent. California's trouble is the increase in production at Inglewood to 107,000 barrels and the boosting of the state to 675,000 barrels daily. This means that 175,000 barrels of California oil must be moved out of that area or run to storage each day. Such accumulation is decidedly weakening on the West Coast whose shipments of refined oils through the canal is largely responsible for the weakness of the gasoline market in the Mid-Continent.

The favorable position held by the Mid-Continent crude market by reason of entire absence of any promising flush areas, and heavy withdrawal of stocks during the fore part of the summer when light oil production started on its decline can be maintained in the face of a general curtailment of Mid-Continent refinery runs, although crude purchasing agencies are reluctant to pile up stocks during the period of high crude prices, as now prevail. The general crude advance initiated by Prairie on July 10 and followed by other buying agencies did not add any appreciable strength to the crude and refined markets, as crude buyers are less inclined to permit an accumulation of stocks at these prices, while gasoline prices are now down to the level at which they were when crude was advanced after enjoying a temporary market flurry for less than one week. However, the prospects for further declines in light oil production sustains this crude raise, and the nature of the development work now underway in the majority of the fields in the Mid-Continent will permit a let down on field work, if necessary to avoid an upheaval in the crude market.

Pushing Fuel Oil

Fuel oil has been pushed forward with a fair degree of success by Mid-Continent refiners since the development of weakness in the gasoline market, and prices have climbed from 5 to 10 cents per barrel in less than two weeks. North Texas refiners were receiving an average price of $1.05 per barrel for spot deliveries at the opening of the present week, and this commodity is reported to be somewhat scarce throughout the Mid-Continent district, owing to its widespread use for cracking. The demand for fuel bids fair to be good over the balance of the year, and refiners are concentrating their efforts on this product in lieu of trying to force their gasoline on the market while prices are on the downward trend.

The heavy movement of gasoline from California refining centers via tankers to the Atlantic and Gulf ports is playing an important part in the lessened demand and lower prices for Mid-Continent gasoline, while the major refining interests on the Atlantic and Gulf Coasts are liquidating their gasoline stocks as much as possible. The record breaking consumption of gasoline as related by current Government reports is being taken care of from these sources to a large extent.

Oklahoma-Kansas Storage

The crude oil market in the Oklahoma-Kansas section is stronger than last week. No premiums are in evidence but contracts are more numerous and indications are toward strength.

Behind this condition of the crude market is the fact that independent refiners in the two states have taken stock of their condition and have decided their position is better than was calculated. With stocks down and runs at a safe figure, refiners are convinced that their only course is to continue business on a safe basis, being confident prices will respond favorably to a condition where consumption is at its peak and production under consumption.

Events of the past week best illustrate conditions in the Mid-Continent crude market.

The Phillips Petroleum Company of Bartlesville has made sales to both the Atlantic Refining Company and the Vacuum Oil Company. The Vacuum is taking another 1,000,000 barrels of Burbank crude, having accepted shipment of 2,000,000 on a previous contract. It was reported that the new contract called for a 50 cent premium, something not verified. The oil will be shipped by tank cars to Texas, loaded on tankers for delivery at Atlantic seaboard points.

The amount of the Atlantic contract was not made public, but shipments are already being made and the deal is supposed to involve at least 1,000,000 barrels.

The Mid-Continent Petroleum Corporation (formerly Cosden) is building a pump station near Morrison in Pawnee County, in preparation for taking over connections of the Kay County Gas Company in parts of Osage County. The Kay County company is the transporting unit of the Marland organization. It is thought to be giving up Osage connections in order to take on more connections of high gravity oil within the Ponca City area.

Inglewood Production 107,000 Barrels

Unexpected increase in California flush field real threat to market on the West Coast

By Wm. V. Gross
Staff Representative

Los Angeles, Calif.—Upsetting the prognostications of most of the statisticians, Inglewood field's daily average production soared to 107,000 barrels for the week ending July 25. This remarkable output came in face of the belief on the part of many that the field's peak had been reached, and as a major portion of edge wells had been drilled, leaving the inside locations to be developed more slowly, that the natural decline would better than offset any flush yield.

Oil was recovered in the area this week at a rate of 10,000 barrels more per day than it was last week, notwithstandingg the fact that there were two less completions with an initial production aggregating only about 10,000 barrels.

From the marketer's point of view, Inglewood is the thorn in the flesh of the California oil situation. In the event there is not a boost in the price of Eastern crudes, or a phenomenal increase in local consumption, Inglewood will be responsible for a cut in California oil if production there keeps up at its present rate, it is felt. All California production in excess of 500,000 barrels, roughly speaking, must either go into storage or seek a market elsewhere, and under the present conditions, the latter alternative is highly impracticable. A number of new wells are expected to be completed in the field during the next 10 days, which will further complicate matters, if there is not a decided slump in the older production.

However, the situation at Inglewood promises relief before two months have passed in view of the fact that the field's major operators, the Associated Oil Company, the Petroleum Securities Company, the Standard Oil Company, and the Shell Company, have yet only a minor portion of development work undone. With this work completed, provided no new sand is found, the production should decline to a figure which would cease to be a menace to the market.

Light Oil at Rosecrans

The largest high gravity producer of the state was recently completed in the western section of the Athens-Rosecrans district in the Barnsdall Oil & Refining Company's O'Dea 5. The well, which produced 2550 barrels of 40 gravity oil from 4556 feet, has created a revival of interest in the western section of Rosecrans. O'Dea is especially significant because it is producing from a sand about midway between the two previously exploited producing horizons. Hitherto, the top zone of production in Rosecrans, generally encountered around 4250 feet, and the deep zone, found at about 4800 feet, have furnished all the field's production.

Adjoining or nearby acreage is held by the Superior, Union and Associated oil companies. It is expected these companies will inaugurate drilling campaigns to develop the new sand.

Considerable attention is being given the Wanka sand in the Athens-Rosecrans district. The Associated Oil Company, which is responsible for finding the sand locally, recently completed its Wanka 1, previously a small producer in the upper zone, for 1500 barrels of 40-gravity oil.

Dominguez No. 7, Marland Oil Company's deep test in the Dominguez field, has effected a water shutoff after a second attempt, and has 200 feet of oil standing in the bottom of the hole. Showings encountered in and above the 50 feet of pay sand provoke the belief that the well will be a producer. In the event it is completed as a commercial proposition, the Associated, Shell and Union are expected to follow the Marland's initiative and drill for the new 5505-5555-foot sand. Previous production in the Dominguez field has come from a sand at about 4200 feet.

On American Avenue, in the Long Beach field, four new wells spudded in during the past week looking for the 4300-foot sand recently found in the O'Donnell Oil and Refining Company's O'Donnell No. 37. As the discovery of the sand is a recent incident, it will be about 10 days before the announcement of any completions in that district. However, with around 30 tests under way, something of importance should be developed soon, despite the feeling that many of the locations have been staked out rather far from proven territory and will turn out failures.

Considerable mystery is attached to operations of the Milham Exploration Company on its wildcat well near Playa Del Rey, in Southern California. Until recently the well, which had been drilled to below 3800 feet, had no showings of particular importance. Scouts were surprised to see the operators set 11-inch casing at 3880 feet in the face of this information.

Ohio Will Deepen Producer In Pine Island District

Shreveport, La.—The Ohio Oil Company is preparing to drill deeper in its E. K. Smith No. 17, located in section 12-21-15 of the Pine Island district of Caddo Parish. Several hundred barrels of oil were swabbed from a sandy lime at a depth of 3317 feet, but drilling is to be resumed in an effort to develop flowing oil production. The Dixie Oil Company is drilling at 3400 feet in its Jolley deep test, in section 27-22-15, and the Fortuna Oil Company is drilling at 3485 feet in its Mitchell deep test in section 17-18-16, near Waskom. The Texas Company is drilling at 3625 feet in its Jeems Bayou deep test, in section 15-20-16, near Mooringsport. Haynes Brothers are drilling at 3080 feet in their Louisiana L. S. & P. deep test in section 8-19-16.

Light and Heavy Oil Production

Week Ending July 25

The following table shows the light and heavy oil production for all the fields in the United States during the past week in comparison with the previous week:

	July 25		July 18	
Field—	Light	Heavy	Light	Heavy
Oklahoma	430,830	9,215	430,890	9,220
California	408,700	266,500	392,500	268,000
Texas	272,606	143,525	271,121	146,870
Eastern States	103,800	.....	105,500	.....
Mountain States	98,695	4,530	101,365	5,010
Kansas	93,715	1,520	97.300	1,525
Arkansas	38,090	201,785	38,470	215,330
Louisiana	43,300	15,060	43,235	18,225
Totals	1,489,736	642,135	1,480,471	664,180
Grand U. S. Total	2,131,871		2,144,651	

Many Types of Power Used in Oil Production Work

Efficiency of field powers largely determines operation cost—Valuable hints on this item

By Harry Pennington
Mechanical Engineer

ALTHOUGH the oil industry furnishes the genesis of power—oil fuel—the field itself is a large consumer of power. The 300,000 producing wells in the United States, the 25,000 to 30,000 wells drilled annually, field oil gathering systems, water systems, maintenance shops, pipe-line pumping stations, vacuum pumping stations, gasoline extraction plants, form a total of some 500,000 to 600,000 individual applications of power in varying amounts, and each application, within itself, constitutes a power problem.

With the exception of main line pumping stations, each power application is small in quantity; beginning with the shallow well, where a minimum of five horse power may be required, the power for pumping wells runs on up to fifty and more horse power per well. The application of power to a well on the beam has a dual purpose; the fluid must be pumped to the surface as a regular continuous operation, except when the well must be worked upon, cleaning, pulling rods to replace cups or barrels, when the power requirement is considerably higher.

Taking for example, say 50 barrels pumped from 3000 feet in 24 hours. The actual horse power of lifting the oil to the surface consists of lifting 10 pounds of oil per minute 3000 feet, or 30,000 foot pounds per minute, which is not quite one horse power. But the frictional horse power of the standard rig and the efficiency of the working barrel make this power requirement larger—the smallest engine that can operate such a well satisfactorily would be not less than 15 horse power, for, since power is applied only half the time, on the upstroke, the power requirement is doubled.

But, to serve the dual purpose of pulling tubing, the horse power becomes more to secure rapidity. Fifteen horse power, with proper ratio of speed between engine or motor and the tubing being lifted, would pull the tubing, to be sure, but, in maintaining an oil property, time is oil, and oil is cash, making some speed necessary, so that 15 horse power would make the operation too slow, causing a loss in production.

To pull 3000 feet of 6.25-pound tubing, or 19,750 pounds weight at the rate of 50 feet per minute, is a matter of 30 actual horse power, on a foot-pounds-per-minute basis. With an efficiency of 50 per cent for the standard rig, including the belt, bull ropes and wire line tackle, the minimum horse power for that speed of lifting tubing becomes 60. If 30 horse power were put on that well, each time the tubing is pulled, the loss in production, and in pay roll, would be around $15. And, another reason for 60 horse power is that the speed ratios on practically all standard rigs is the same, and 30 horse power would not begin to lift the tubing in the usual manner of tackle arrangement.

Because of mechanical troubles, not generally overcome as yet, the limiting depth of wells that may be pumped on a pull power with the wells grouped, is about 2500 feet, where a small engine, relatively, may operate a number of wells, but the operation of deep wells, those over 3000 feet, is a matter of applying a power unit for operating each individual well. And, as the average depth of wells drilled today is perhaps greater than 3000 feet, field power has become more of a problem than in former years.

Every well has a power history. Power is required first for drilling, with auxiliary power requirement for pumping water, and perhaps fuel. After the well is brought in, and the owner is fortunate to have it pass through a flowing period, swabbing is done in many cases, which requires about the same size power unit as drilling. Or the well may be pumped with compressed air from a central air compression plant, or an individual air compressing unit, requiring more horse power per well.

As production declines to within the capacity of working barrels, the well may then be placed on the beam, whether the well is shallow or deep, for the reason that general pull power operation up to the present time has not afforded the pump displacement necessary to lift large quantities of oil to the surface from an individual well.

Following the period of beam pumping in the case of shallow wells, the sucker rods may be hooked to a pull rod line for the long settled production period, but if the well is deep, the same standard rig is maintained to pump the well on the beam.

In all these phases of power application to wells, viz., drilling, swabbing, or blowing with air, beam pumping and pull rod pumping, the power consumption descends in quantity, and when a central power station is being considered, the probable future power requirement is worthy of careful study, not only from the producer's standpoint but from the power equipment manufacturer's standpoint, as well as that of the central power station company.

The power required for drilling increases with the depth of well. Wells to 2500 feet may be drilled with a string of standard tools, using a 50 horse power oil country boiler, operating a single cyinder slide valve engine, and to greater depths with a correspondingly larger boiler and engine or two boilers. As has been previously noted in the pages of The OIL WEEKLY the oil country boiler is a great big steamer since it will evaporate much greater quantities of water into steam than the rating signifies; but the engine, on the other hand, consumes more steam per engine horse power than one developed boiler horse power. In other words, taking the boiler horse power at 34½ pounds of steam evaporated per hour, and an engine requiring 50 pounds of steam per horse power per hour, there is required 1.44 developed boiler horse power per engine horse power, and an engine developing 50 horse power requires therefore 72 developed boiler horse power. And, further, assuming a boiler evaporation of nine pounds of water per pound of oil, a 50 horse power boiler and engine unit consumes 0.87 barrels of fuel oil per hour.

On the basis of $2 fuel oil, delivered at the boiler station, the fuel cost is $34.80 per day, or 4.66 cents per kilowatt hour at full load.

It is quite impossible, however, to predict the power consumption for a well drilled with standard tools; should the hole be wet, bailing requires more power than if the hole were dry; if underreaming is necessary and casing must be moved frequently, power requirement is greater than with straight drilling. For doing the maximum amount of work, the power must be ample and the load factor may run as low as 20 per cent. The peak is also high, for maximum power is required

for certain operations to be done with rapidity.

A pair of boilers, an engine, and a pair of drilling pumps in rotary work present a greater power consumption than standard tool work, especially since drill pipe is handled out of the hole and back frequently in most fields.

With the rotary, the boiler plant may consist of one, two or three boilers to provide from 60 to 150 boiler horse power for operating engine and pumps and the engine power, using a single engine may read, instantaneously, up to 125, while the twin engine may read up to 200.

There is one peculiarity—and advantage—of steam power that may be noted here. This type of engine develops maximum torque at zero speed, or, in other words, it pulls the most with a standing start under load. Although the engine may develop maximum torque, and start a maximum load moving upward, it may not be developing more than 15 or 20 per cent of its maximum power because of the slow rate of doing work. The steam engine develops its maximum torque under the above condition, because there is sufficient time in which to allow full boiler pressure to act on the piston, but when running at full speed, say 250 revolutions per minute, steam pressure against the piston may be reduced 50 per cent by wire drawing of steam through the slide valve, and the power per revolution correspondingly diminished.

A gas engine, on the other hand, develops practically constant torque, and therefore depends upon revolutions for power, each revolution being a fraction of the total horse power developed. Thus an 80 horse power gas engine at 200 revolutions per minute develops 4/10 horse power per revolution, 40 horse power per 100 revolutions, while a multi-cylinder gas engine of the same power, running at 1000 revolutions per minute, develops 8/100 horse power per revolution, or eight horse power per 100.

Then, to hoist a heavy load, requiring 80 horse power, the steam engine will tighten the lines against the load and then raise the load at such speed as will develop the required torque, while the gas engine must be allowed to get up to speed to permit its lower torque to develop the required horse power.

But we are leading off the main subject.

The maximum duty in drilling with the rotary is when casing is being set or pulled, and since the heaviest string of casing is usually 6⅝" in the average well, that string affords a means of ascertaining the power requirement on a drilling rig. As a matter of fact, an average drilling rig should be rated according to its capacity to set and pull a string of 6⅝" of the proper weight for the depth involved.

There is no such thing as gearing a 40 horse power up to 100, for if we slow the speed of lifting the load, by gearing down, the horse power remains the same. Power may be compared to the old lever problem: lengthen the lever arm, shorten the power arm, the load lifted is more for a given amount of power but the speed of lifting the load is less. To gear a 40 horse power up to 100, as the writer was once informed, is something that even magicians can not do.

Right here, perhaps, a power definition would be in place. From custom, one horse power is the equivalent of lifting 33,000 pounds one foot in one minute, which brings into play the quantity of weight lifted, the distance, and the time, and all three are necessarily a part of any horse power computation. To lift 33,000 pounds one foot in one-half minute, develops power at the rate of two horse power per hour, and to lift 16,500 pounds one foot in one-half minute, is one horse power, and so on. One indicated horse power of a steam engine is the power developed within the cylinder, part of which power is consumed in overcoming the friction of the engine itself, and steam engine efficiencies must be known to determine the actual delivered horse power. In an internal combustion engine, however, power is measured as delivered at the engine shaft—shaft horse power or brake horse power, which is taken at full value without deduction for engine friction.

Horsepower may also be expressed in torque. The usual method of expresssing torque is by taking the force exerted by one pound pull at a distance of one foot from the center of a shaft, or at a distance of one inch from the center of the shaft, which force twists or turns the shaft, or T equals dW; T signifying torque, d, the distance from center and W the weight exerting the force. A usual formula for torque in pound feet is:

$$T = \frac{\text{h. p.} \times 5252.1}{R}$$

and, in pound-inches:

$$T = \frac{\text{hp} \times 5252.1 \times 12}{R}$$

With R being the revolutions per minute.[1]

Torque may be developed by the pull of a wire line around a drum and by other means.

Electrical horse power is expressed in watts; one volt, the pressure; times one ampere, the volume, equals one watt, the quantity, and 1000 watt hours equals one kilowatt hour.

Abbreviated:

K. W.=1000 watts=1.34 horse power
H. P.= 746 watts=0.746 K. W.

$$\text{K. V. A.} = \frac{\text{true power}}{\text{apparent power}} = \frac{\text{watts}}{\text{volts} \times \text{amperes}}$$

$$\text{K.W.} = \frac{E \times 1}{1{,}000} \quad \text{(direct current)}$$

$$\text{K.W.} = \frac{1.73 \times E \times I \times \text{P.F.}}{1{,}000} \quad \text{(3 phase alternating current)}$$

P. F. being the power factor, and the factor 1.73 being the square root of 3 for three-phase current.

And, since power and heat are on a mutually interchangeable basis, 2550 B. t.u.'s per hour equals one horse power.

If a gas engine develops one horse power on 10 cubic feet of natural gas, averaging 1000 British thermal units per cubic foot, then the engine has utilized 25½ per cent of the heat of the gas by converting that quantity into power, and the engine therefore has a thermal efficiency of 25½ per cent.

In every conversion of power or change of direction or increase or reduction in rotative speed through a mechanism, there is a loss of power passing through the machine making such change. In a standard rig, beginning at the power shaft—engine or motor—power losses are sustained in the belt drive from the driving pulley to the band wheel, of approximately 10 per cent; in the bull rope drive to the bull wheel, also approximately 10 per cent; in the wire rope tackle from the bull wheel shaft to the tools in the hole, 15 per cent more, and the combined efficiency is therefore 90x90x85 per cent, or 68.85 per cent mechanical efficiency. Handling casing, the efficiencies run for the belt, 90 per cent; for the calf wheel drive, 90 per cent; for the multiple wire rope tackle, 80 per cent, making the combined efficiency 64.8 per cent.

In the rotary, power losses are about as follows:

In the chain drive from engine sprocket to line shaft sprocket; in the chain drive from line shaft sprocket to drum sprocket; in the wire rope multiple tackle and the combined efficiency of this arrangement is approximately 65 per cent. In both these measurements the shafts are presumed to be accurately aligned, bearings oiled, and in good condition.

These losses of power may be reduced by good design, thorough erection, accurate maintenance of alignment, correct lubrication, and may be materially reduced by anti-friction bearings such as ball bearings and cone roller bearings, or straight roller bearings.

If, say 60 horse power is required to drive a drilling rig doing a certain work, and there is lost in friction 30 per cent, then 18 horse power is required to drive the rig, light. Then, when 36 horse power is required of the rig, 18 of it going to overcome friction losses, only 18 horse power is required for the work done, and the mechanical efficiency in this case becomes 50 per cent. And, since the average drilling rig requires about one-half the engine power applied to it, average, the present type of drilling equipment wastes approximately one-half of the power applied to it. Some of this waste is unavoidable; some of it avoidable.

And, in the matter of economic waste with reference to power: We have seen that 2550 British thermal units are

[1]From Favary.

the equivalent of one horse power. The thermal efficiency of the best types of internal combustion engines is about 30 per cent, so that to deliver one horse power, or its equivalent, 2550 B. t. u.'s, 8333 B. t. u.'s per horse power must be supplied to the engine, of which 5783 are lost in conversion. Many would term this loss an economic waste. But, since these losses are a matter of mechanical and chemical engineering skill, it seems that a measuring stick of waste, in this respect, would be to take the highest skill known in the art of power making, and to say that all power made with any greater heat loss is a waste of just the amount of difference between the lower efficiency and the higher.

The economic waste of which the oil industry has been accused by governmental authorities is relative waste only; every operation involves waste of some kind—necessary, or rather, unavoidable waste, or losses not preventable in the light of present-day engineering. One of these losses, the greatest, is that of heat in the generation of power, whether from steam boilers and engines or turbines, or internal combustion engines. The oil industry certainly buys the best there is manufactured, and so long as the industry does so there is no avoidable waste, for the standards set up by the present best practice in power generation certainly do prevail in the oil industry.

As a matter of comment, the use by the industry of the most advanced type of oil engines in main pipe line stations for pumping oil has no parallel in any other industry when this practice is compared to power generation. The great central power stations, furnishing power to industry, do not achieve the thermal efficiency of the trunk line pumping station.

When pumping wells with a pull power, there are also many losses between the cylinder and the fluid at the surface. In the engine, in the pull power drive, in the shackle lines, in the sucker rods, in the working barrel, in the friction of the oil coming up the tubing. As a maximum performance, the writer has connected 35 wells, each with 1600 feet average of sucker rod, with an average length of shackle line per well of 600 feet, to a single pull power, driven by an engine developing 39 horse power. The average horse power per well was 1.04; the average length of shackle line and sucker rod was 2200 feet.

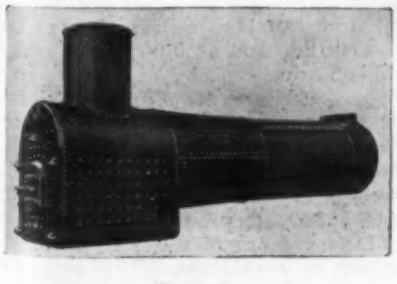

Figure 1
Oil Country Boiler

The power requirement for pipe line work is in units for operating pumps of definite capacity and pressure, depending upon the size of pipe line. Engines from 85 horse power on up to 750 are applied.

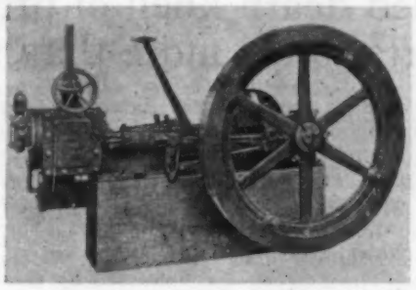

Figure 2
Single cylinder 11-inch by 12-inch slide valve steam drilling engine with balance weights for standard tool drilling

Figure 1 shows the oil country boiler, a great steamer, that develops approximately 60 per cent efficiency; Figure 2 shows a single cylinder drilling engine, and Figure 3 a twin cylinder drilling engine.

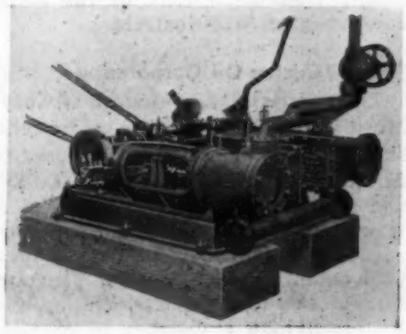

Figure 3
Twin cylinder slide valve steam engine with 10-inch by 10-inch cylinders equipped for rotary drilling

The cost of the power unit for standard tool drilling ranges about as follows:

45 horse power boiler	$1500
11x12-inch single engine	750
Injector, feed pump	200
Valves and fittings	125
Total	$2575

Weight, 18,000 pounds.

For a two-boiler rotary installation, with twin engine:

Two 45 horse power boilers	$3000
10x12-inch twin engine	1500
Injector, feed pump	300
Valves and fittings	250
Total	$4050

Weight 28,000 pounds.

In these two power units, the annual costs may be computed on the basis of forty horsepower for the single boiler, or $64.00 per horsepower, with a fuel consumption of five pounds of fuel oil per horsepower hour—a liberal credit to this type of prime mover.

The two boiler installation, at 75 horsepower, is $54.00 per horsepower and the fuel consumption the same per horsepower hour.

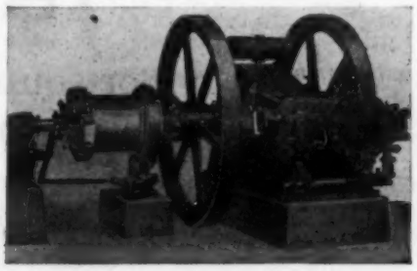

Figure 4
Thirty-five horsepower gas engine with reverse clutch for cable tool drilling shallow wells and for general pumping with standard rig

Figure No. 4 shows a single cylinder gas engine, thirty-five horsepower, costing approximately $1800.00 erected, including concrete foundation, or $51.00 per horsepower and having a fuel consumption of twelve cubic feet of gas per horsepower per hour.

Figure 4-A
Main Line Pumping Station during erection

Figures Nos. 4 and 5 show a Diesel engine, costing approximately $75.00 per horsepower, installed on concrete foundation, and having a fuel consumption of one-fourteenth pound of fuel oil per horsepower hour.

Figure No. 6 outlines a central power station, consisting of water tube boilers with superheaters, large turbo-generators, condensers, cooling tower, switchboards, transformers, exciters. To distribute power, high tension transmission lines are necessary, with sub-stations, and then lines from sub-stations to the circuits in the field. The cost per kilowatt hour, maximum capacity, of the modern central station is $125.00, or $86.00 per horsepower; of the substation, $40.00 per kilowatt hour,

(Continued on page 68)

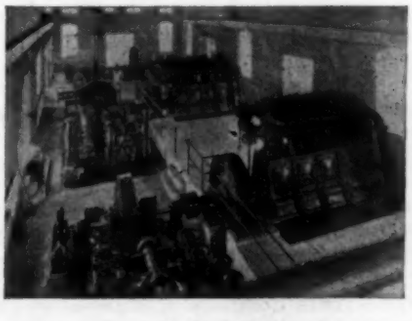

Figure 5
Modern Main Line Pumping Station five hundred horsepower full Diesel Engines

$34,000,000 Worth of Mexican Sea Terminals Now Junk

Salt water sounded death knell of properties so located that transportation is more than salvage value

Chorreras, Veracruz. — The latter part of August will see the closing down of the last sea-loading terminal along the 18-mile stretch of the Gulf Coast from Tecomate to Agua Dulce, Veracruz, and these terminals, which cost approximately $34,000,000 to construct, will all have been abandoned, and with a salvage value of not more than $4,000,000.

At the height of production in 1921, from the "Golden Lane," as the light oil producing district was known, and when construction was still at its greatest, 4250 men were employed at the seven sea-loading stations and topping plants along this stretch of the beach, and at times there were as many as 48 tankers either loading at the end of sea lines or awaiting berths so as to take on cargo.

The sea-loading stations were constructed by companies having pipe-line facilities neither to Tampico nor Tuxpam to handle production from wells ranging from Tepatate on the north to Cerro Azul on the south, and were at their greatest usefulness when salt water started intruding in Northern Amatlan, Zacamixtle, then Toteco, and Northern Cerro Azul, which in the latter two districts alone cut production more than 200,000 barrels daily. Salt water spelled the death knell of these terminals, and the latter part of 1922 saw the first one—that of the Cortez Oil Corporation—closed. This was followed in August, 1923, by the Atlantic Refining Company, which was allied with the Cortez Oil Corporation, and then by the joint terminal of the Transcontinental Petroleum Company (Standard of New Jersey), and the Tide Mex Oil Company (Tidewater); The Texas Company, on January 1, 1924; Agwi (Atlantic Gulf and West Indies), on August 1, 1924; Island Oil and Transport Company, January 1, 1925; and the last operating, the Mexican Seaboard Oil Company, will handle its last barrel of crude not later than August 31, 1925.

Pipe lines had been laid from fields, gathering and pump stations in the interior to locations on the coast by these companies in the order named: Island Oil and Transport Company's terminal and topping plant, placed in operation March, 1918, at Palo Blanco; Cortez Oil Corporation and topping plant of the Atlantic Refining Company, August, 1918, at Guayabalillo; The Texas Company of Mexico, which started loading tankers in November, 1918, at Agua Dulce; Agwi, at Tecomate, and the Transcontinental Petroleum Company (Standard of New Jersey), at Chorreras, April, 1920; Mexican Seaboard, March, 1921, at Chorreras, and Tide Mex Oil Company (Tidewater), July, 1921, at Chorreras.

The flow lines constructed by these various companies ranged from 28 to 35 kilometers in length and from steel storage at terminals which in the case of the Cortez Oil Corporation totaled 450,000 barrels, with the joint terminal of the Transcontinental and Tide Mex, 935,000 barrels, it was possible to load from 3000 to 7000 barrels per hour from sea-loading lines ranging from 4900 feet in length from low-water mark to 12,000 in length, with a total hourly loading capacity of the seven companies of 33,000 barrels.

Cortez Oil Corporation

The Cortez Oil Corporation at Guayabalillo, the first to cease operations, shut down its pumps in 1922. It is understood that this plant cost $2,000,000, and at one time it employed 200 men. It was possible to bring into this terminal 58,000 barrels of oil daily from a field pump station at Lot 5, Tepetate, through one 10 and one 6-inch line, and a 10-inch loop a distance of 35 kilometers, with the first oil coming through in August, 1918. The company had two sea-loading berths of two 8-inch lines each, with a total hourly loading capacity of 3000 barrels. It had nine steel storage tanks of 450,000 barrels capacity. Practically no attempt has been made at salvaging any part of this terminal equipment. At the time the Cortez terminal was closed, the company sold its production to the Mexican Eagle, which during May, 1925, received 33,816 barrels of Cortez oil.

La Atlantica

The Atlantic Refining Company had a 15,000-barrel topping plant adjacent to the Cortez terminal, from which it received its crude oil, with both plants under control of the same interests. This topping plant, closed August 1, 1923, cost $5,000,000, and at one time employed 500 men. It had two sea-loading berths, one of two 10-inch and one 8-inch line; the 8-inch line being used for loading distillates, with the other lines for the handling of topped crude. The company had 11 steel storage tanks of a total capacity of 566,000 barrels, and, like the Cortez, no effort has ever been made to salvage any of the equipment.

Standard and Tidewater

The Transcontinental Petroleum Company (Standard of New Jersey) and the Tide Mex Oil Company (Tidewater) had a joint terminal at Chorreras, of which the latter company owned one-third. The estimated cost of this terminal was $6,000,000, and at one time it employed 1000 men. It was closed in 1923. Although some of this terminal has been salvaged, the entire plant has been virtually wrecked, material is being moved into Tampico at a transportation cost which provides no salvage profit.

The Transcontinental received its oil from Lot 135, Chinampa, a distance of 31 kilometers, and from Lot 214, Amatlan, a distance of 34 kilometers, with the total capacity of these flow lines into Chorreras of 115,000 barrels. The first oil was put through into the terminal and the latter placed into operation in April, 1920. Beginning with July 1, 1925, the Transcontinental sold all of its light crude production to the Mexican Eagle, and this at the present time is averaging 3000 barrels daily.

The Tide Mex was able to obtain 35,000 barrels daily from a 10-inch flow line from Lot 93, Zacamixtle, a distance of 31 kilometers, with the line placed into operation July, 1921. This company had a gross production of but 931,000 barrels, although it is understood to have spent a total of $6,500,000 covering its one-third share of the terminal and its field operations.

The two companies had jointly 17 steel storage tanks at Chorreras, capable of holding 935,000 barrels of oil.

The Texas Company

The Texas Company had its terminal and a 10,000-barrel topping plant at Agua Dulce, and ceased operations on June 1, 1924. Although built prior to war times, it is estimated that this terminal and plant cost $4,000,000, and it employed 300 men. It received its oil from Lot 11, Tepetate, through one 10-inch line and a 10-inch loop with a total flowing capacity of 50,000 barrels daily. There were two sea-loading berths at the terminal of two 8-inch lines, each with a maximum of 3000 barrels hourly. These lines were the longest on the coast, running slightly over 12,000 feet into the Gulf before sufficient depth of water could be obtained to enable tankers to anchor in

safety. The company had 11 tanks of 561,700 barrels capacity at the station.

Agwi

The Agwi (Atlantic Gulf and West Indies) had its terminal and a 25,000-barrel topping plant at Tecomate, and ceased operations August 1, 1924. This was the most expensive plant along the coast, cost about $9,000,000, and at one time employed 7000 people. It received its oil from Lot 251, Amatlan, a distance of 35 kilometers, with the flow lines able to handle 80,000 barrels daily. The first line was placed in operation in April, 1920. The company had two sea-loading berths with two 10-inch oil and one 8-inch distillate line each, to which it was able to load into tankers 7000 barrels per hour. These lines were the shortest along the coast, projecting but 4900 feet into the Gulf of Mexico. There were 14 steel storage tanks of 735,000 barrels capacity on the property. At the time the terminal was closed, the Agwi sold its production to the Mexican Eagle, and at the present time this is still averaging about 4000 barrels daily. No effort has been made to salvage any of the material at the terminal in the year it has been shut down.

Island Oil and Transport

The Island Oil and Transport Company (Cia. Metropolitan de Oleoductos, S. A.), had a sea-loading terminal and a 5000-barrel topping plant at Palo Blanco, which closed January 1, 1925. This was the most cheaply constructed plant on the beach, having cost somewhat less than $2,000,000. At the time of its construction it was virtually impossible to either buy or obtain deliveries of new material, with the result that both the terminal, topping plant and sea-loading lines were built of used material purchased mainly in Virginia and Kansas. The oil was received from Lot 8, Tepetate, a distance of 28 kilometers, and the two 8-inch flow lines were able to bring 50,000 barrels of oil daily into the 715,000 barrels of storage in the 13 tanks at Palo Blanco. The company had two sea-loading berths of two 10-inch lines each, with a total loading capacity of 3000 barrels hourly. In view of the fact that the company handled 36,000,000 barrels of oil at this terminal, with construction cost far below that of any other company, it is estimated that its profits from the operation of the terminal and topping plant were greater than those which accrued to any of the other companies along this section of the beach. At the closing of the terminal, the Island sold its production to the Mexican Eagle. This is at the present time averaging 15,000 barrels daily. No effort at salvage has been made covering this property.

Mexican Seaboard

The Mexican Seaboard Oil Company, which is scheduled to close down not later than August 31, 1925, has a terminal at Chorreras costing $6,000,000. At the height of the construction period 1000 men were employed. Oil was received through two 10-inch flow lines and a 10-inch loop from Lot 216, Amatlan, with a total flow of 100,000 barrels daily into the terminal, where there were 16 steel tanks with a capacity of 880,000 barrels. The flow lines and terminal were first put into actual use on March 31, 1922. The company had three sea-loading berths of two 10-inch lines each, with an hourly maximum loading capacity of 7000 barrels.

Although the Mexican Seaboard ceased using this terminal for its own needs at the end of 1923, it has been kept in operation for the handling of production of the Standard of New Jersey, so that the latter could start salvage work, and again because the Seaboard was the only company maintaining a tug for mooring purposes and having a deep sea diver to keep its sea lines in shape. Since this time nothing but Standard of New Jersey oil has been handled, and in view of its having to maintain a considerable working force at the terminal, the Seaboard has at little or no cost been able to salvage considerable of its equipment. More so, in fact, than any of the other companies. The pumping equipment, however, in conjunction with that of all other companies, will be virtually a total loss, as the pumps are of low-pressure variety and not usable for any purpose other than the operation of sea-loading lines.

As with other companies, the Mexican Seaboard, at the time of closing its terminal, sold its production to the Mexican Eagle, and this is still averaging 3000 barrels per day from wells at Toteco.

Oil Conservation Report Ready in December

Washington, D. C. — Investigation work of the President's oil board has been practically completed, it was stated today, and the board will proceed to the study of the data accumulated, the replies submitted in response to its questionnaires and other information with a view to preparing a concrete statement of the precise conditions affecting the industry, as evidenced by the industry itself. It is anticipated that the board will make its report to the President and congress early in December, following the digestion of the mass of information now before the board, the cardinal principles involved and the outstanding problems confronting the country and the industry will be singled out and public hearings will be held, to which the presidents of a number of the large oil corporations will be invited. This hearing, it is believed, cannot be held for at least two months.

During the course of the investigation more than three hundred of the leading men of the industry were asked to submit information and advice. With but few exceptions, responses were received; a small number expressed inability to reply to the technical questions propounded. A report has been prepared for the board, disclosing those who replied, those who did not and those who confessed a lack of technical knowledge.

Members of the board today expressed their appreciation of the cooperation given by the majority of the industry, declaring that the opinions and views of the oil men were worthy and constructive and highly valued by the board.

Shallow Well at Paciencia

Chijol, Veracruz.—In the completion of well No. 23, Paciencia, for 1000 barrels initial production at a depth of 1500 feet, the Transcontinental Petroleum Company (Standard of N. J.) have not only brought in the shallowest well in that district, but have proven up considerable new area in the hacienda as the new producer is approximately a kilometer south of well No. 16 on the border line between Paciencia and Chapacao.

Production in Paciencia, which several months ago totaled approximately 50,000 barrels daily, has been constantly decreasing because of the intrusion of salt water and present withdrawals are but 7000 barrels a day.

The Mexican Gulf Oil Company has completed an eight-inch pipe line from well No. 5, Chapacao, to Corcovado, a distance of five kilometers and are preparing to turn No. 5 into the line to flow under well pressure until the pumping stattion, now 50 per cent completed, is placed into operation.

When completed well No. 5 was estimated as a 5000 barrel producer and is considerably shallower than most of the wells drilled in this district.

Donoghue With Texas Pacific

Fort Worth, Texas.—David Donoghue, consulting geologist of Houston, has moved to Fort Worth to become chief geologist for the Texas Pacific Coal & Oil Company. Donoghue enjoys a wide acquaintance throughout the Mid-Continent district, having been a member of the geological staff of the Gulf Production Company in the North Texas district for a number of years.

PERSONAL MENTION-MEN YOU KNOW

M. B. Crowe of Houston has recently become a representative of the Durion Company, Inc., of Dayton, Ohio, and its subsidiary, the Alcumite Corporation of Dayton. Mr. Crowe will sell the acid-proof equipment of these companies in South Texas, with offices at 4001 Caroline Street, Houston.

Dr. Fritz Kaselitz, manager in Mexico of the North American Exploration Company has been transferred recently to the Houston office of the Company where he will assist Dr. Kurt Von Mucke in the management of the Texas operations. This company is now covering a wide field in Oklahoma and Texas in the geophysical examination of underground structures by the use of the torsion balance and other scientific instruments for the large producing companies.

L. C. Tilbury, drilling contractor for Harvey & Rush, Houston, was in Houston several days this week from Lakes Charles, on business.

O. V. Borden, secretary of the Tulsa Purchasing Agents Association, met last week in Oklahoma City with F. W. Robertson, of the Skelly Oil Company, C. C. Witt, of the Parkersburg Rig and Reel Company, Charles Harter, of the Tulsa Oxygen Company, Frank Dunn, of the H. F. Wilcox Oil and Gas Company, and Carl Good of the Barnsdall Corporation for the purpose of organizing a purchasing agents association in the Capitol City.

C. R. Troxell, independent operator at Electra, Texas, spent several days in Houston this week on business.

Charles O. Shumaker of St. Louis has been made Mid-Continent representative for the Charles N. Hough Manufacturing Company, Franklin, Pennsylvania, and will be located in Tulsa.

Bob Moore, chief scout for the Vacuum Oil Company, Houston, returned to the office last week after making a trip covering several East Texas oil fields.

A. H. Knodle, Swiftsure Petroleum Company official, Houston, left last week for Galveston where he will spend part of his vacation on the beach.

M. L. Latham of the Humble Oil & Refining Company statistical department, Houston, is spending his vacation in San Antonio and other parts of Southwest Texas. R. E. Welsh of that department has recently returned from his vacation spent in East Texas.

George R. Marland, president of the Reagan County Purchasing Company with headquarters at Houston, returned last week from a business trip that took him to Fort Worth and Austin.

J. Edgar Pew, president of the American Petroleum Institute, was in Tulsa last week on his way to Dallas after a trip to Washington, New York and other eastern points. Mr. Pew states that he expects a report from the Federal Oil Conservation Board in October.

J. M. Sheers has been appointed North Texas representative of Norris Brothers, Inc., of Robinson, Illinois, with office in Fort Worth. He has formerly North Texas district manager for the Oil Well Supply Company at Wichita Falls.

John C. Bennett, formerly with the Prairie Oil and Gas Company, has accepted a position with the New England Oil and Pipe Line Company as production manager, to be located at Dallas. He succeeds J. E. Krebbs, who held this position prior to the coming of Bennett, and who has resigned to enter business for himself.

Edward Soph, 124 West Third Street, Tulsa, has been made representative of the Duriron Company and the Alcumite Corporation of Dayton, Ohio, to cover Oklahoma, Kansas, North Texas and Southwest Arkansas.

GEORGE S. HALLEY

who was burned to death last week by steam from a boiler on a lease at Pierce Junction. Mr. Halley was 27 years old and resided with his parents at 1214 Noble Street, Houston, Texas. He had served considerable time in foreign fields and was popular in many Gulf Coast sections, having worked for several of the larger companies.

L. H. Keller has accepted a position as special representative of the Sullivan Machinery Company, and will be located in the Atlas Building in Tulsa. Of interest in the Tulsa office is a collection of geological formations taken from core drillings over Oklahoma and other Mid-Continent states. George E. Failing is state agent of the Sullivan Machinery Company.

E. B. Wood, assistant to vice president of the Sinclair Oil and Gas Company, Houston, is spending his vacation of two weeks at home in Houston.

Harry Simms, member of the production department of the Gulf Production Company, Houston, is spending the greatest part of his two weeks vacation in the Gulf of Mexico, at Galveston.

Fred Reusch, purchaser for the Gardner Petroleum Company, has returned to his office to resume work after spending his vacation of two weeks in the Minnesota lake region.

E. O. Haines, formerly superintendent of production for the Vitek Oil and Refining Company and well known operator in Eldorado, Arkansas, is now associated with James W. Rich in the Rich Development and Petroleum Company now being organized with offices at 401 Bankers Mortgage Building, Houston. Mr. Rich is an old time wildcatter in the Texas Gulf Coast, and the new company will begin business by starting a series of wildcats in Wharton County where it has holdings of more than 10,000 acres.

D. V. Douglas formerly purchaser for the Gilliland Oil Company, Tulsa, and a member of the Tulsa Association, has resigned to take charge of a new sanitarium being opened in Claremore, Oklahoma.

J. D. McLin, New York belting representative for the International Supply Company, has returned from a vacation of one month spent at Long Beach.

B. T. McNeil, vice president of the Swiftsure Petroleum Company, Houston, left on a business trip to New York during the past week.

W. L. Todd, vice president and production manager for the Simms Oil Company, Dallas, has returned from a vacation spent in the mountains of Colorado. Mr. Todd reports fishing not so good, but remarked that the climate and scenery made the trip worth while.

FIELD NOTES AND PRODUCTION STATISTICS

Braman Looks Good; Thomas Pool Uncertain

Enough oil has been found at Braman to insure thorough drilling; Thomas well shows water

By Grady Triplett
Staff Representative

Tulsa, Okla. — Both Braman and Thomas continue to hold top positions in Oklahoma's field development. Braman seems tagged for success, with a high output of light oil. The Thomas area is a perplexing problem.

The Braman townsite pool is now doing better than 15,000 barrels daily. Gauges for the 24 hours ending at 7 o'clock Monday morning of this week follow:

	Barrels.
Comar Oil Co. Betchel 1	5,713
Horne 1	2,474
Johnson 1	2,304
Herbert Oil 1, townsite 1	4,867
Townsite 2	13
E. V. Shawver townsite 1	95
Total	15,466

Failures in the townsite have convinced lease owners that the oil pool will be found by outside drilling. Scores of cores have been taken in the Braman area and indications are that the high point of the structure will be northeast of the townsite. Section 5 of Township 28 north, Range 1 west, is looked on as favorable for further production from the Stalnaker sand, found around 2400 feet.

Core drilling has indicated a structure at Braman. With production coming in sufficient quantity to warrant continued drilling, it is assured that the district will have a thorough test. Wilcox sand production is another possibility of the area. This lower sand will be tested, once the drilling that the shallower sand requires has been done.

Water in Thomas Pool

While the Thomas pool has its second well, Siler No. 2 of the Twin State Oil Company, northwest corner of Section 22-25-2 west, its performance is such that the future of the pool is uncertain. The well was completed for 2700 barrels, total depth 4317 feet, 300 feet deeper than Thomas 1 of the Marland Refining Company, a north offset, 680 feet distant. Later water began to give trouble. Sunday of this week the well made 950 barrels of oil, while water was coming in at 20 barrels an hour.

Source of water has not been determined. Neither have efforts been successful in shutting it off.

Meanwhile the first well, Thomas 1 of the Marland Company, continues to flow clean oil. The gauge for Monday morning at 7 o'clock was 3222 barrels.

Most geologists are agreed that a fault separates the two wells and is responsible for the difference in the Wilcox sand. But direction of the fault is unknown. This adds to the mystery of the district.

The well being watched now is School Land 25 of the Marland Company. It is in the southeast corner of the southwest quarter of Section 16-25-2 west, Kay County. With reference to the other wells, it is three-fourths of a mile west of the Marland Thomas well. The hole was 3982 feet deep Monday morning. As the top of the Wilcox is not expected before 4200 feet, it will be next week before results of the test are available.

The importance of this well is that it may reveal the trend of the fault. If the Wilcox is found running uniform with the Thomas well, three-fourths of a mile east, then the fault will be to the south of each well. Should the fault cut off the School Land well from the Thomas well, then the fault will have a northwest-southeast trend.

Four new locations have been made around these wells: Elk Oil Company Henderson 1, Section 7-25-2 west; Gypsy Oil Company Smith 1, Section 9-25-2 west; Marland Refining Company Stahl 1, southwest of Section 22-25-2 west; Twin State Oil Company Fuller 1, Section 14-25-2 west.

The chief interest in Oklahoma is in this district, where the Wilcox sand is being sought. Success of the Wilcox sand at Tonkawa, the continued production of the one Wilcox well at Garber, and other scattering Wilcox sand pools make this a desirable sand, as the oil is around 44 degrees Baume, commanding a premium, as well as a high mark on the posted price scale.

What a Wilcox sand pool can do is told by the history of the lower pay at Tonkawa. This sand is producing around 36,000 barrels daily, while its total production is near 29,000,000 barrels.

Although the transaction takes approval at the office of the Five Civilized Tribes at Muskogee, the 320 acres of the Mekesukee Indian Mission, in Section 5 and 6, Township 8, Range 6, Seminole County, will likely go to The Texas Company, whose bid of $86 an acre was high.

This is the last unallotted land of the Seminole tribe available for leasing. The high price came despite the fact that production is 10 miles distant in Section 10-8-7, where the Ossie Oil Company has a well. But the Mission land is on a structure and it was eagerly sought by producing companies.

Royal Dutch Shell Withdraws From Peru

Washington, D. C.—Much local comment has been aroused by the action of the Royal Dutch Shell petroleum interests in withdrawing entirely from the Peruvian field after but a few months' work, according to a report to the Department of Commerce by Commercial Attache H. Bentley MacKenzie, of Lima.

This company first became active in the Peruvian field about a year and a half ago, since which time it is understood to have purchased, leased, and taken options on approximately 1,000,000 acres of petroleum lands in Northern Peru, in addition to acquiring the operating rights on an area of the government's oil reserves.

Early in the present year a subsidiary company was registered in Peru to undertake the production of petroleum on these lands, this company being known as the Cia. Petrolera Peruana-Holandesa, S. A.

The authorized capital of this company was Lp. 1,000,000, and under the terms of its contract with the government it was required that at least 25 per cent of this amount be subscribed by local investors. All of this local capital was quickly supplied, according to reports.

Within the past few weeks, however, this company, it is stated, has been returning the money subscribed by these local investors with the statement that the company was ceasing all operations and withdrawing from Peru. It is reported that all of this money has now been returned.

According to the Peruvian press, representatives of the company state that petroleum indications found were not sufficient to warrant any further investment by the company.

It is reported that during the short period of its activity this company invested in Peru between 70,000 and 100,000 Peruvian pounds.

Rycade Drills Orange Test to 5867 Feet

By Roy Wallace Davis

A STUDY of the log of the Rycade Oil Corporation's Cow Bayou A-5, wildcat well near Orange, is interesting as it records the failure of the deepest test ever drilled in the Gulf Coast region. The well was abandoned at 5867 feet in gumbo and shale after operations lasting more than 10 months. Although strong gas pressure was encountered several hundred feet below the mile line, no oil sands were found below 5186 feet. The abandonment of the well followed the twisting off and losing of the drill stem.

Other features concerning the Cow Bayou A-5 besides the depth reached serve to make this test one of unusual interest. Operators of the test were working against disadvantages from the time of making the location until orders were given to abandon the well. The well was located in the middle of the flowing Cow Bayou, a stream cutting the lowlands near Orange and emptying into the Sabine river, 40 feet south of the south line of the Sun Company's Gun Stream lease and 15 feet west of the east bank of Cow Bayou on the Cow Bayou lease. Thus, in order to secure a substantial foundation for the derrick and rig a platform was necessary, requiring the sinking of piles made of pine trunks between one and two feet in diameter 10 to 20 feet in the earth. On completion of the derrick it stood practically in the middle of the stream.

Operations on the Cow Bayou A-5 offered a class of work, which, although not uncommon in the swampy regions near the gulf, is seldom seen in oil fields generally. Workmen were employed on this test for the sole purpose of transferring men and equipment from the banks of the stream to the derrick floor in flat bottom rowboats.

Another disadvantage faced throughout much of the drilling of the Cow Bayou A-5 was the encountering of heavy gas pressure at various intervals on the way down, which caused much trouble in keeping the well under control.

At the point of abandonment the drill bit was in the oligocene horizon, of which the Heterostegina formation is typically characteristic and one of the best producing horizons in certain sections of the United States. Other indications of pay were found just above the point of abandonment in the appearance of good showings of gas. Further drilling was considered unwise by officials of the company, however, in that several days of fishing for the lost drill pipe resulted in failure. Casing was badly worn from months of continuous friction, and to bring about success, provided oil was struck, an entire string of casing would have been necessary to replace the worn casing.

The Cow Bayou A-5 was drilled with an Oil Well Supply drilling rig complete, and the drill pipe used was a mixed string of 3-inch National Tube and Standard seamless upset drill pipe. Operations were begun with an 18½-inch hole and finished with a 3-inch pipe in a 6-inch hole. After abandoning the well, a cement plug was set at 2200 feet, and the hole was filled with mud and capped.

The drilling of the Cow Bayou A-5 was under the supervision of Fred W. Dallas, field superintendent of the Rycade Oil Corporation, with W. W. Baker as field superintendent. The drillers of the well were J. B. Baker, Sam Roberson, D. M. Tpney, L. J. Barbe, A. G. Gordon and B. Duhon.

Log of Deepest Gulf Coast Test Well

Following is the log of the well, in part, showing formations below the depth of 3805 feet:

Feet.	Feet.	Formation.
3805	3825	Sand and shale, hard.
3825	3830	Sticky shale.
3830	3838	Sandy lime.
3838	3849	Sticky shale.
3849	3852	Sandy lime.
3852	3862	Sand; cored 3862 feet; no show.
3862	3884	Steady sand and shale.
3884	3912	Shale sand and lime.
3912	3927	Tough, limy sand.
3927	3955	Sand, shale and lime.
3955	3970	Limy shale.
3970	4012	Gumbo.
4012	4015	Sand and shale.
4015	4039	Sand; cored 4015 feet; no show.
4039	4090	Gumbo.
4090	4102	Sand and shale; cored 4096 feet; no oil.
4102	4162	Gumbo.
4162	4166	Hard shale.
4166	4205	Gumbo.
4205	4234	Sand; cored 4209 feet; some oil.
4234	4268	Gumbo.
4268	4269	Shale.
4269	4271	Sand and shale; cored 4249 feet; no show.
4271	4289	Hard sand and shale.
4289	4299	Sand, shale and lime.
4299	4301	Hard sand.
4301	4303	Hard sand, shale and lime.
4303	4305	Hard sandy lime.
4305	4306	Hard sand and lime.
4306	4309	Boulders and gumbo.
4309	4313	Sand and shale; cored 4313 feet; no oil.
4329	4348	Sand and shale.
4348	4351	Gumbo.
4351	4354	Sticky shale.
4354	4357	Sandy shale.
4357	4387	Sand; cored 4357 feet; no show.
4387	4399	Gumbo.
4399	4402	Sand and shale; cored 4402 feet; no oil.
4402	4407	Soft sand.
4407	4412	Hard sand.
4412	4415	Sand.
4415	4423	Gumbo.
4423	4425	Sand and shale.
4425	4432	Sand; cored 4430 feet; no oil.
4432	4454	Gumbo.
4454	4478	Sand; cored 4457 feet; no oil.
4478	4490	Shale, lime and gumbo.
4490	4496	Shale and lime.
4496	4512	Gumbo.
4512	4527	Shale.
4527	4565	Gumbo.
4565	4569	Sand; cored 4569 feet; no oil.
4569	4572	Sand and shale.
4572	4574	Gumbo.
4574	4603	Gumbo and shale.
4603	4605	Gumbo; cored 4610 ft.; good show.
4605	4614	Sand; cored 4614 ft.; no show.
4614	4635	Sandy shale; cored 4617 ft.; no oil.
4635	4643	Shale, lime and gumbo.
4643	4647	Sand and shale.
4647	4649	Sandy lime.
4649	4652	Gumbo.
4652	4654	Sand and shale.
4654	4676	Gumbo and shale.
4676	4677	Gumbo.
4677	4679	Sand and lime.
4679	4720	Shale, lime and gumbo.
4720	4723	Gumbo.
4723	4729	Sand and shale; cored 4726 ft.; no show.
4729	4732	Sand; cored 4730 ft.; no show.
4732	4751	Sand and shale.
4751	4757	Sand, shale and lime.
4757	4781	Sand and shale.
4781	4793	Sandy lime.
4793	4824	Sand and shale.
4824	4838	Sand, shale and lime.
4838	4865	Sand and shale.
4865	4881	Gumbo, shale and boulders.
4881	4889	Tough gumbo.
4889	4920	Lime, shale and gumbo.
4920	4935	Shale, lime and gumbo.
4935	4940	Shale, lime and sand.
4940	4961	Sand, hard and soft streaks.
4961	4995	Sand; cored 4961 ft.; no oil.
4995	5003	Sand and shale.
5003	5010	Gumbo.
5010	5012	Hard sand.
5012	5022	Limy gumbo.
5022	5025	Shale, lime and sand.
5025	5029	Gumbo and shale.
5029	5037	Sand; cored 5033 ft.; no oil.
5037	5044	Gumbo.
5044	5048	Sand, lime and shale.
5048	5058	Shale and lime.
5058	5072	Sand, 4 ft. hard, 2 ft. soft; cored 5063 ft.; no oil.
5072	5084	Shale, gumbo and lime.
5084	5092	Sand, shale and lime.
5092	5105	Limy gumbo.
5105	5118	Sand; cored 5118 ft.; no oil.
5118	5170	Sand, shale and lime.
5170	5186	Sand; cored 5181 ft.; light show of oil.
5186	5196	Hard sand; cored 5186 ft.; no show.
5196	5206	Sand and lime.
5206	5208	Shale.
5208	5216	Hard sand.
5216	5229	Sandy lime and shale.
5229	5231	Shale and lime.
5231	5269	Sand, shale and lime.
5269	5280	Sand, shale, lime and gumbo.
5280	5289	Limy gumbo.
5289	5294	Shale; small breaks of sand "soft."
5294	5317	Sand, shale and lime; cored 5294 ft.; no show.
5317	5326	Lime, shale and gumbo.
5326	5335	Limy gumbo.
5335	5349	Gumbo and lime.
5349	5354	Sand, shale and lime.
5354	5359	Sand and shale; cored 5354 ft.; no oil.
5359	5364	Sandy shale.
5364	5420	Sand, shale and lime.
5420	5422	Sandy lime.
5422	5430	Sand; cored 5430 ft.; no oil.
5430	5434	Hard sand and shale.
5434	5456	Sand, shale and lime.
5436	5465	Hard sand.
5465	5477	Gumbo, with little lime.
5477	5501	Gumbo.
5501	5524	Gumbo, shale and lime.
5524	5528	Shale, lime and gumbo.
5528	5602	Gumbo.

5602	5616	Gumbo and shale.
5616	5625	Gumbo.
5625	5629	Shale and gumbo.
5629	5648	Gumbo.
5648	5653	Lime, shale and gumbo.
5653	5683	Gumbo.
5683	5690	Gumbo and shale.
5690	5721	Shale, lime and gumbo.
5721	5723	Hard sand; cored 5722 ft.; no show.
5723	5725	Soft sand.
5725	5726	Hard sand.
5726	5727	Sand; cored 5726 ft.; now show.
5727	5748	Gumbo, shale and lime.
5748	5760	Gumbo.
5760	5846	Gumbo and shale; heavy gas show.
5846	5858	Gumbo; cored at 5765 ft.; no oil.
5850	5867	Gumbo and shale.

Mexico to Expel Drilling Contractors Who Won't Pay

Tampico, Tamps.—Following the recommendation of Labor Inspector Andres Araujo, Article 33 (expulsion by presidential decree), will be applied to certain drilling contractors not only for failure to pay Mexican laborers, but because of mistreatment accorded them.

According to Inspector Araujo, it is the growing practice of many companies operating in this district to let contracts for the drilling of wells rather than handling the work themselves, and that the contractors obtaining this work being financially irresponsible, have failed to live up to their agreement with their laborers, with the result that many complaints have been filed with him. It was at his suggestion that a clause was placed in drilling permits making the companies obtaining the permits responsible for the paying of laborers used in drilling the well, but despite the clause, he has received complaints as above noted.

Application of Article 33 has been recommended and a study is being made of the complaints turned over by his office, and if found justified, drilling contractors in question will be expelled from the country.

Independent Deal Reported Off

Tulsa, Okla., July 27.—Evidently the deal whereby properties of the Independent Oil and Gas Company, the Waite Phillips Company and the Texhoma Oil and Refining Company would have been combined has failed.

Reports from New York state that "a hitch in finances prevented completion of the deal."

None of the principals in the transaction has returned here.

Marland Earnings

Ponca City, Okla.—Net income of the Marland Oil Company and its subsidiaries for the first half of 1925 reached $8,270,371, more than double the amount for the corresponding period of last year. This showing comes after allowing for interest, depreciation and depletion, but before allowing for federal taxes, estimated at $482,000.

Allowing this tax estimate leaves the shares earning at $4.48 a share on the 1,735,371 no par shares outstanding.

Gas Flow Found in Nacatoch Sand in Stephens Wildcat

El Dorado, Ark.—A gas blow-out occurred Sunday night in the Buffalo Oil Company's Morgan No. 2, a semi-wildcat test located in the southeast quarter of the northwest quarter of section 22-15-19, Ouachita County. This location is on the outskirts of the town of Stephens, at a point about two miles east of the oil field of that name. Considerable prospecting has been done in the general vicinity. A recent well drilled by the same company on the same property promises to be as good a pumper as the average of the wells located within the proven field. The blow-out occurred at about midnight, while the crew was running six-inch casing in the hole, and lasted for about four hours until the well bridged over. Observers estimated the gas flow at approximately 20 million cubic feet per day. The crown block was blown off and one side of the derrick was damaged by falling drill stem.

The depth of the hole is logged as 2121 feet, where casing was to have been set to test the Blossom sand. However, it is believed that the gas came from the Nacatoch formation at around 1400 to 1500 feet, as several showings of gas, and likewise oil, were noted at that level during the development of the Stephens field two years ago.

The blow-out is heralded as an important event, as the Nacatoch sand, although surpassingly fertile at Smackover, a few miles distant, has not yet yielded oil or gas in commercial quantity at Stephens, where small pumpers can be made in the Blossom sand at around 2100 feet or deeper. A number of tests were made in the Nacatoch horizon during 1923, and alluring showings of oil and gas were found, but the Buffalo well offers the first real promise of important production.

A good gas well at Stephens doubtless would prove a profitable venture, as there is little or no gas in the productive oil sand, and a number operators are forced to use steam and electricity for fuel. The town of Stephens might afford a market for gas for domestic use.

According to latest reports, deep sand production at Smackover now averages approximately 145,000 barrels per day. Deep sand completions to date total 590 wells, of which 145 are still flowing, 280 have been put on the pump, and 165 are dead, awaiting the construction of pumping rigs.

A real gusher, reminiscent of the earlier phase of the deep-sand boom, was brought in last week on The Texas Company's Berry lease in the northwest quarter of section 33-15-15 of the deep sand area. The well was finished in the Graves sand, and is credited with an initial flow of 7000 barrels of pipe line oil per day. It is located in an area not heavily drained by earlier drilling.

Crawford & Sebastian's Graves No. 5, in the southwest quarter of the northeast quarter of section 3-16-15, which is producing light oil from the Blossom sand at 2550 feet, has increased its flow to around 5000 barrels of clean oil per day. Other recent Blossom sand completions have yielded only gas or small oil production. For instances, the Natural Gas and Fuel Corporation's Houston No. 1, in section 12-16-16, is making 20 million cubic feet of gas and large quantites of salt water from a total depth of 2742 feet; Eason et al's Palmer No. 4, in section 9-16-15, is making 35 million cubic feet or gas and a heavy flow of salt water from a total depth of 2643 feet; Hickman et al's Graves No. 1, in section 3-16-15, is flowing 600 barrels of 25½ gravity oil from 12 feet of sand at a total depth of 2553 feet.

The Gilliland Oil Company is drilling at around 1250 feet in a second deep test located on the Myar "B" lease, in section 30-15-16, of the Louann field. A promising oil sand is said to have been inadvertently cased off in an earlier deep test drilled on this same tract. Stock and others are preparing to set casing and test an oil-bearing sand logged at 2860-62 feet in their Polk & Ezell deep test in section 18-17-14 of the El Dorado East Field.

A number of Arkansas scouts have gone to Stamps today to witness an important test now in progress in the Humble Oil and Refining Company's Reed-Bodcau Lumber wildcat in section 16-15-22 of the northeastern part of La Fayette County. Six-inch casing was set at approximately 1215 feet. It is rumored that an oil-bearing sand was cored at about that depth, but no one has been permitted to see the core or the log of the well. This is one of a series of shallow tests being drilled to depths ranging from 1000 to 1500 feet on the Humble's block of more than 100,000 acres of wildcat leases extending northeast by southwest across the entire southwestern corner of the state of Arkansas. It is probably the most extensive wildcat operation ever conducted in this territory.

The Humble Company is now drilling at around 1325 feet in its Shirtliff No. 1, in section 3-16-23. Bradshaw No. 1, in section 26-16-25, La Fayette County, has been abandoned at a depth of 1406 feet. A derrick has been built for another test well on the Ford farm, in section 28-16-24. Estes and others are drilling at around 2210 feet in their Bodcau Lumber Company No. 1, in section 13-18-24.

California Company Buys Production And Refining Interest in West Texas

San Angelo, Texas.—Approximately 430 barrels of settled production in the Westbrook field, Mitchell County, and a substantial interest in the stock of a skimming plant at Colorado, near the field, has been purchased by The California Company, subsidiary of Standard of California, from the West Texas Refining and Development Company. This purchase boosts The California Company's current production in Mitchell County to 1830 barrels daily, while the balance of the production in the field, amounting to 400 barrels daily, is split among six different companies and individuals. The acquisition of stock in this refinery by The California Company is the first step taken by the Standard of California to obtain refining and marketing interests in Texas, and at the expiration of present crude contracts in effect until September 1, 1925, with the Rio Grande Oil Company, El Paso, The California Company will turn all of its Mitchell County production to the Colorado plant.

The consideration paid by The California Company for the above mentioned producing properties, and the amount of stock interest acquired in the refinery, has not been made public, although several days prior to the sale of the properties the West Texas Refining and Development Company bought in the outstanding half interest in the leases from the Sloan Oil Company for a cash consideration of $150,000. Two producing leases are involved in this deal, and both are located in the heart of the proven section of the field. The largest lease is on the Sam Smartt land, being the east half of Section 21, Block 28, with seven wells in the 3000-foot dolomitic lime pay pumping 250 barrels daily, while the other lease is on the H. C. Miller land, consisting of 160 acres in the northwest quarter of Section 22, and bordering the Smartt tract. The Miller lease has three pumpers making 180 barrels daily.

The West Texas Refining and Development Company erected a 1500-barrel daily capacity skimming plant at Colorado about one year ago, and is connected to the field with a gathering line. The company was organized by the Anderson-Prichard Oil Corporation of Oklahoma City, and during the course of the construction work on the plant an interest in the refining company was sold to the Hickok Producing Company of Toledo, Ohio. The refinery sales are handled by the Anderson-Prichard Oil Corporation, which also has a plant at Cyril, Okla.

The first location to be made in close proximity to the L. P. Powell discovery well in north central Crockett County, where more than $5,000,000 has been spent in cash and oil considerations for leases and royalties since the bringing in of the 25-barrel flowing well early last June, has been made by Humble and Marland interests, and is the first of four tests to be drilled in compliance with the purchase contract of the well and nearby leases. This location is known as Powell 2, and is located 3591 feet west of the east line and 1433 feet south of the north line of Section 2, Block BB-2, or 1000 feet due west of the discovery well. The development of the high-priced leases around this wildcat producer has not been as prompt as was expected owing to delay in getting title requirements corrected.

The Kanawah-Angelo Oil Company's wildcat test on the L. T. Clark ranch, located in the center of the southwest quarter of Section 6, G., C. and S. F. Ry. survey, Block "A", in Sterling County, tested dry in sandy lime formation at 3035-50 feet last week after getting traces of oil while drilling in. Perforated joints of 6⅝-inch casing were set with packer at the level in which the oil showing was obtained, before resuming drilling. According to A. G. Womack, general manager for the Kanawah-Angelo Oil Company, another wildcat will be drilled on the Clark ranch in Sterling County, and contract has been made for a 3000-foot test to be started by September.

A light flow of non-inflammable gas was encountered at 1025 feet in the test being drilled by the Penn-Tex Development Company on the Jax Cowden ranch in Crane County, and drilling is now under way below 1300 feet. This test is at the center of the southeast quarter of Section 14, Block 2, H. and T. C. Ry. survey, and is being drilled largely to explore for potash beds.

The Dixie Oil Company, subsidiary of Standard of Louisiana, purchased a lease on 160 acres located in the southeast quarter of Section 2, Georgetown Railroad survey, in lower Reagan County, from C. W. Webster, fee owner, for $75 per acre, half cash and half payable out of oil. This lease is about a half mile due east of Gulf's second wildcat test on University land in Section 1, Block 1. Gulf's test is drilling at 1100 feet.

Roxana's Three District Offices Cover Southwest

Dallas, Texas.—The expansion of the Roxana Petroleum Corporation's leasing and drilling activity into all important oil producing areas in the Southwest within the last year or two has necessitated the establishment of three separate divisions, with a geological, lease and production department in each divisional office. Operating offices for the entire Southwest were formerly maintained at Tulsa, with executive offices at St. Louis, and under the new plan divisional offices are located at Tulsa, Dallas and Houston, with zone offices scattered over the important oil centers in each division. These three divisional offices are under direct supervision of St. Louis headquarters, with the exception of the geological department of each division.

Dr. van Holst Pellekaan, chief geologist for Roxana and also consulting geologist for The Shell Company of California, is located at Dallas, and is in direct charge of the geological department of the three divisional offices in the Southwest. The location of geological headquarters at this point places it at the geographical center of

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Oklahoma and Kansas are in the northern division, with district offices at Tulsa. Tom Harnsberger is in charge of the geological department, and G. M. Piggott is superintendent of the land department. The Gulf Coast district offices are located at Houston, with A. T. Schwennessen in charge of the geological department and Walle Merritt, superintendent of the land department.

The central division at Dallas comprises all of North and Central West Texas, Arkansas, Mississippi, and upper Louisiana, and zone offices are located at Wichita Falls, Shreveport, San Antonio and San Angelo. J. L. Bellinger is field superintendent; B. L. Ryan, superintendent of land department, and Angus McLeod, district geologist. The San Angelo zone office is the most recent to be added to the central division, and was established following Roxana's decision to play wildcats in West Texas. D. H. Larkin is in charge of the land department, and V. L. Cottingham is in charge of the geological department of the San Angelo office.

Standard Moving Smackover Oil Through New Pipe Line

El Dorado, Ark.—The movement of oil through the Standard Pipe Line Company's new ten-inch line from Smackover to the Mississippi River was begun on Saturday of last week. The capacity of the new line is calculated as 24,000 barrels of heavy oil per day. Its length is approximately 95 miles. Pumping stations, with heating facilities at each, have been constructed at Wilmot, Parkdale, Crossett, Felsenthal, Strong, and Ritchie. The heating plants are to be used to warm the low-gravity oil in cold weather.

Oil will be transported from the eastern terminus of the line, at Grand Lake, on the Mississippi River, via barges and river steamers to the Standard Oil Company's refineries at Baton Rouge. The barge line is to be operated under the direction of C. I. Fiero, vice-president of the Standard Oil Company of Louisiana, at Baton Rouge. Smith Day, of Shreveport, superintendent for the Standard Pipe Line Company, is to supervise the operation of the pipe line, which was built under the direction of F. R. McGrew, of Shreveport, vice-president and manager of the Standard Pipe Line Company.

Pipe line runs averaged approximately 270,000 barrels per day at Smackover during June; but, as of July 1, approximately 24,500,000 barrels of oil remained on hand in field storage. More than 6,000,000 barrels of oil were shipped away from Smackover during June, of which more than two-thirds was handled through tank cars. Since the completion of the Standard's 10-inch line, it is considered likely that pipe line shipments may be materially increased during August.

Another Pool in Wilbarger Five Miles West of Electra

Wichita Falls, Texas.—The Waggoner pasture in eastern Wilbarger County added another oil pool early this week when the Tidal Oil Company and Amon G. Carter's wildcat drilled ten feet into sand pay to a total depth of 1995 feet, and filled with 900 feet of oil. Bailing failed to lower the fluid level in the hole, and indications are that the wildcat will make 75 barrels when placed on pump. It is located in the east half of the northwest quarter of section 37, block 4, and about five miles due west of the old Electra field, which is the nearest production. Pipe line connections are available. Tidal has added to its lease holdings since the oil strike, and virtually all the close in acreage is tied up by oil companies, with several new locations planned for offset leases.

The first of eight tests to be drilled by the Atlantic Oil Producing Company on the Waggoner ranch in the Sigler pool in connection with the purchase of half interest in two pumping wells and large block of leases from the Sigler Oil Company is good for 40 barrels on pump from sand at 2027-38 feet. This pumper is located in section 51, block 2, and is 420 feet north of the Sigler discovery well, which gave Wilbarger County its first individual oil pool in March, 1920. The 2300-foot sand pay in the South Vernon pool is furnishing the bulk of the new production, since the productive limits of the upper series of sands are defined, and three fair sized pumpers were completed in the deep pay during the past week.

The trend of production to the northeast of the Litchfield-Carpenter pool in upper Young County was halted during the past week by the completion of three failures on the L. J. Kilcrease land, section 1809. A number of unusually large shallow producers have been scored on the northeast end of this pool lately. During the past week the Plains Production Company's Kilcrease 3 swabbed and flowed 485 barrels initial at 983-998 feet, while Murchison-Fain Oil Company and Litchfield's R. Campbell 9-D swabbed and flowed 550 barrels initial at 967-993 feet. The Oxford Oil Company scored two failures on its Kilcrease lease early this week, thereby partially defining the pool, and Murchison-Fain Oil Company's Kilcrease 1 also proved dry after drilling to 1030 feet. The deep pay in lower Young County contributed a semi-wildcat producer when Hinson and associates' N. Laquey 1, J. Buse survey, made an initial flow of 15,000,000 cubic feet gas and spray of oil at 3938 feet. This well is located six miles southwest of Graham, and on north bank of river near a deep producer brought in several years ago by the Southwestern Miami Development Company. The oil flow in the Laquey test has since increased to about 70 barrels daily, with gas pressure receding to four million cubic feet.

A minor extension to the northwest of the Muse-Lowe pool in lower Archer County was made by Gulf Production Company's M. Wear 1-A with an initial production of 20 barrels daily at 1285 feet. A diamond core drill being used by Marland Oil Company to explore the sub-surface conditions around the Ickert pool near the south line of Archer County is reported to have taken a good oil sand core at 1202-07 feet in the northwest corner of the Ickert land. Skipping a barrier of dry holes forming the deadline for oil production on the east side of the Texhoma-Gose pool in north central Archer County, the semi-wildcat test of Riner-Bailey & Archer Oil Corporation's S. M. Gose 1 is credited with having pumped 115 barrels of oil during the first 13 hours on pump from sand at 1586-88 feet. This discovery indicates the existence of a new pool adjoining the old Texhoma-Gose area, and all the surrounding leases are held by Texhoma Oil & Refining Company.

The Magnolia Petroleum Company has regained its leadership in production in the North and Central West Texas fields with a daily average of 12,320 barrels, while The Texas Company takes second place with a daily average of 11,540 barrels. Humble ranks third with 6,665 barrels daily, and Gulf Production Company is fourth with 6,475 barrels. Texhoma Oil & Refining Company is next in line with 4,838 barrels. This comparison does not extend to the Big Lake field in West Texas, where Big Lake and Texon Oil & Land Company each have more than 16,000 barrels daily.

Carter in Russell County, Kansas

El Dorado, Kans., July 27.—The Carter Oil Company has entered the Russell County area of Western Kansas and will drill two tests on the leases already acquired. The northeast quarter of Section 6-12-15 will have one test. This is on the Tichenor farm, more than a mile northwest of the discovery well of the Russell County area.

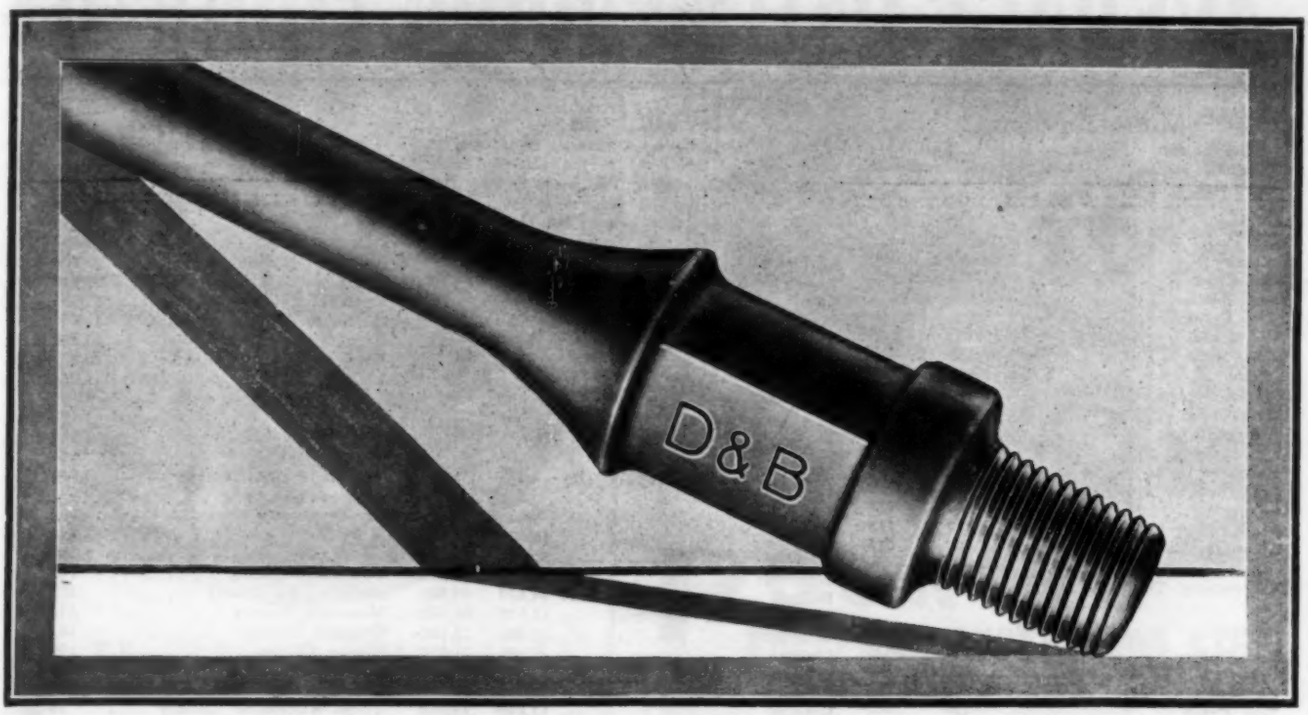
The other lease is the west 80 acres of the southwest of the northeast of Section 5-12-15. The company has established an office at Russell.

The Russell field has 35 producing wells, with 18 rigs running.

Union Employes Get Stock

Los Angeles, Calif.—Subject to the assent of the stockholders and the approval of the California Corporation Commission, employees of the Union Oil Company of California have been given the opportunity to purchase 100,000 shares of the capital stock of the company, according to an announcement made July 20 by John McPeak, secretary.

Shares will be sold to the employees at $36.50 each, 5 per cent below the average market price quoted on the New York Stock Exchange for the past two months.



The Rod with the WHITWORTH THREAD

D. & B. Quality extends all the way through each D. & B. product from the careful selection of materials to the careful packing for safe shipment to you. No detail is too small to have our best efforts to make it the best of its kind in the world. * * * The D. & B. Sucker Rod with the Whitworth Thread is an example of D. & B. attention to details. Months of research and experimenting demonstrated to us that the Whitworth Thread was the highest standard for strength and quality among all types of threads in use. This was an improvement that would do its share to make D. & B. Rods the best on earth. So back in 1923 we began turning out D. & B. Quality First Sucker Rods with the Whitworth Thread and have found that rods with this thread are the most satisfactory, have greater strength, and give less trouble in service. * * * * * The Whitworth Thread, which D. & B. have been using exclusively for more than a year, is just one of the many reasons why D. & B. Quality First Sucker Rods are the best in the world today.

D+B TRADE MARK QUALITY FIRST

D & B Pump & Supply Company

301 West Avenue 26,
Los Angeles, California.

Branch Factory: P. O. Box 1033, Dallas, Texas
Representatives In All Principal Oil Fields

AVERAGE DAILY PRODUCTION FOR U.S.

Mountain States

Pipe line runs from all the fields in the Rocky Mountain region for the past and previous weeks was as follows:

WYOMING

	Past Week	Prev. Week
Salt Creek	57,090	60,880
Lost Soldier	5,430	5 235
Grass Creek	4,720	4,635
Big Muddy	3,280	3,300
Rock River	3,020	3,020
Teapot	1,640	1,615
Poison Spider	1,300	1,700
Mule Creek	850	920
Elk Basin	830	940
Lance Creek	700	700
Hamilton Dome	680	625
Osage	350	370
Lander	300	380
Ferris	110	115
Greybull	20	215
Wyoming Totals	82,320	84,770

COLORADO

Fort Collins	1,400	1,425
Craig	680	680
Florence	260	265
Tow Creek	120	125
Rangely	100	100
Boulder	25	20
Colorado Totals	2,585	2,615

MONTANA

Sunburst	12,000	12 000
Cat Creek	3,500	3,515
Montana Totals	15,500	15,515

NEW MEXICO

Artesia	1,800	2,300
Hogback	530	465
Rattlesnake	490	510
New Mexico Totals	2,820	3,275
Grand Total	103,225	106,375

Kansas

Greenwood	28,485	28,390
Rainbow Bend	14,100	18,320
Eldorado	13,875	13,890
Elbing and Peabody	5,590	5,595
Augusta and Douglas	3,100	3,105
Fox-Bush	2,915	2,920
Blankenship	2,320	2,325
Florence and Covert	1,950	1,950
Other fields	22,900	22,320
Totals	95,235	98,825

California

Los Angeles, Calif.—Estimated daily average production of crude oil in the principal California oil fields during the week ending July 25 is given in the following table:

Field—	Past Week	No. Prod. Wells	Prev. Week
Inglewood	107,000	110	97,000
Long Beach	106,000	515	106,500
Santa Fe Springs	54 000	341	53,000
Huntington Beach	46,000	312	46,500
Torrance	37,700	555	37,500
Rosecrans	18,300	55	29,000
Dominguez	31,700	59	16,500
Other Fields	274,000		274,500
Totals	675,200	1,947	660,500

Oklahoma

	Past Week	Prev. Week
Burbank	56,000	56,070
Tonkawa	52,390	52,775
Cromwell	34,090	35,040
Bristow	44,650	44,885
Osage (outside Burbank)	35,600	35,630
Okmulgee	25,000	25,100
Cushing	21,000	21,050
Gilcrease-Papoose	17,090	17,470
Wewoka	13,775	13,790
Braman	17,890	15,860
Hewitt	14,800	14,850
Garber	12,190	12,100
Otoe	5,500	5,570
Stroud	4,090	4,195
Other fields	85,980	85,720
Totals	440,045	440,110

Louisiana

Haynesville	12.250	12,805
Cotton Valley	10,765	11,165
Caddo Light	9,025	8,640
Vinton	8,225	10,900
Homer	6,690	6,615
Bull Bayou	4,015	4 100
Bellevue	3,120	3,110
Caddo Heavy	2,335	2,265
Evangeline	800	820
Elm Grove	555	575
Edgerly	505	480
Lockport (Lake Charles)	50	50
Anse La Butte	25	25
Totals	58,360	61,550

Arkansas

Smackover heavy	200,360	213,770
Smackover light	27,610	27,975
El Dorado	8,715	7.720
Stephens	1,765	1,775
Irma	1,425	1,560
Totals	239,875	253,800

Texas

NORTH-CENTRAL

Field—	Past Week	Prev Week
Corsicana-Powell	47,346	48,735
Archer County	36,655	36,090
Wortham	30,275	32,375
Big Lake-Reagan County	32,895	27,995
Mexia	19 810	20,050
Electra	17,305	17,625
Stephens County	15 295	15,385
Burkburnett	14,120	14,155
Eastland County	10,375	10,390
Young County	11,250	10,300
South Vernon-Wilbarger Co.	8,660	9,190
Richland	4,400	4,800
K-M-A and Iowa Park	4,945	4,755
Moran-Shackelford County	3,540	3,870
Panhandle District	3,770	3,515
Callahan County	3 355	3,395
Brown County	2,960	2,995
Mitchell County	2,295	2,355
Currie	1,300	1,300
Palo Pinto County	725	760
Petrolia-Clay County	375	380
Montague County	410	295
Coleman County	185	180
Baylor County	190	75
Scurry County	60	60
Throckmorton County	50	55
Thrall-Williamson County	35	40
Jack County	25	25
Totals	272,606	271,120

GULF COAST

South Liberty	21,250	21,900
Hull	18,650	20,400
Orange	19,575	19,800
West Columbia	11,175	11,400
Goose Creek	10,275	9,900
Humble	4,250	4,250
Sour Lake	4,250	3,880
Saratoga	1,575	1,650
Batson	1,400	1,400
Damon Mound	1,200	1,200
Spindle Top	1,125	1,150
Blue Ridge	810	950
Big Creek	850	765
High Island	575	575
Pierce Junction	425	425
Markham	75	75
Barbers Hill	135	140
Dayton	50	50
Nacogdoches	30	30
Totals	97,575	99,940
Totals North C. Texas	272,606	271,121
Luling	22,000	22,500
Mirando	9,400	9,600
Somerset	3,075	3,080
Lockhart	10 925	11,400
Misc. South Texas	550	555
Totals	416,131	417,991

Condensed U. S. Production for Twelve Months

(Stated in Barrels)

This table is compiled each week by The OIL WEEKLY, and shows daily production average for each state or section.

Daily average for month	*Mid-Continent	North Central Texas	Texas Coastal	Texas Total	Kansas	Okla.	Louisiana	Eastern States	Wyo. Mont. Colo. New Mexico	Calif.	Ark.	Total
March	762,684	284,874	78,567	388,221	69,864	407,946	55,783	97,800	128,352	650,790	119,869	1,917,023
April	777,590	276,595	76,755	380,005	71,015	429,980	54,740	101,250	127,700	649,825	128,750	1,943,270
May	763,320	267,475	74,175	374,915	71,490	424,355	60,655	103,800	127,770	640,930	148,630	1,952,545
June	799,230	260,785	74,335	375,310	74,265	464,175	62.660	105,750	125,735	628,400	157,165	1,993,465
July	815,830	254,665	75,445	378,365	81,545	479,620	63,855	107,175	124,305	620,175	148,655	2,003,695
August	861,640	254,520	75,700	377,045	85,765	521,355	62,595	107,000	123,895	619,200	142,740	2,037,890
September	886,650	253,243	76,953	366,197	86,758	546,647	62,162	107,622	117,345	611,500	131,343	2,029,580
October	855,823	247,222	75,713	359,861	86,884	521,717	62,493	106,600	107,270	605,060	123,235	1,972,902
November	851,733	248,467	71,648	369.621	86,031	517,237	66,117	106,375	91,205	594,000	119,893	1,950,478
December	873,344	267,065	65,437	385,410	88,065	518,213	59.602	106,875	83,472	606,875	111,402	1,959,917
January	906,160	334,305	65,065	448,900	88,390	483,465	56,520	106,200	78,435	602,600	106,280	1,970,350
February	861,130	292,796	63,885	405,195	88,790	479,545	56,825	105,125	87,710	599,375	106,085	1,927,680
March	839,300	301,795	83,800	434,410	84,965	452,440	58,030	100,550	90,900	605,775	112,425	1,939,520
April	836,110	294,040	94,215	435,035	84,360	457,710	57,700	98,250	91,845	602,800	209,840	2,037,545
May	835,350	295,695	100,205	447,080	93,610	446,040	60,945	101,140	91,492	609,200	419,770	2,269,280
June	834,927	286,095	94,514	432,121	98,220	450,637	59,977	103,675	87,477	642,500	349,962	2,249,296
July 3	813,168	272,438	89,040	413,328	99,160	441,570	62,075	104,000	94,365	669,000	260,755	2,144,253
July 10	806,640	272,380	93,785	414,230	99,315	434.945	60,162	105,000	93,640	670,000	242,160	2,119,452
July 17	810,056	271,121	99,940	417,991	98,825	440,110	61,550	105,500	106,375	660,500	253,800	2,144,651
July 24	807,886	272,606	97,575	416,131	95,235	440,045	58,360	103,800	103,225	675,200	239,875	2,131,871

*Includes North Central Texas, Kansas, Oklahoma.

NOTE—Wortham, Corsicana-Powell and Mexia production included in North Central Texas.

Here's the Test—

Ask Any User!

Three things you want to know before buying a Pipe-Line Trench Excavator.

ONE—what it will do.

TWO—what it costs to operate.

THREE—the reliability of the manufacturer.

The first two points are answered by data from the Humble Pipe Line Co.

$15.25 for 1400 Feet

The trench was 21 miles long, 28 inches deep, and 18 inches wide. It was completed in 18 days. Average cost per foot of trench, 1.9 CENTS.

The third point is best answered by an owner of three Buckeyes. He says: "The Buckeye organization is the squarest and easiest to do business with that I know of."

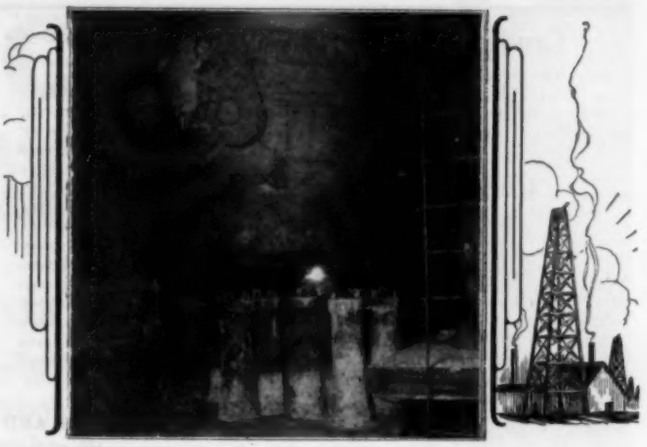
Add to this 30 years of successful Trench Excavator experience, and you have a pretty good idea why Buckeye owners are Buckeye boosters.

The Buckeye Traction Ditcher Company
FINDLAY, OHIO

Manufacturers of Pipe-Line Trench Excavators and Pipe Screwing Machines

THERE'S A BUCKEYE SALES AND SERVICE OFFICE NEAR YOU

BUILDERS OF TRENCH EXCAVATORS FOR 30 YEARS



POURING
SHEFFIELD SUCKER ROD STEEL

The above photograph shows a "heat" of Sheffield Sucker Rod Steel being poured from the huge ladel into ingots.

Only PURE steel that is free from impurities and which has been carefully analyzed and tested, is permitted to go into the formation of the ingots which ultimately become Sheffield Sucker Rods.

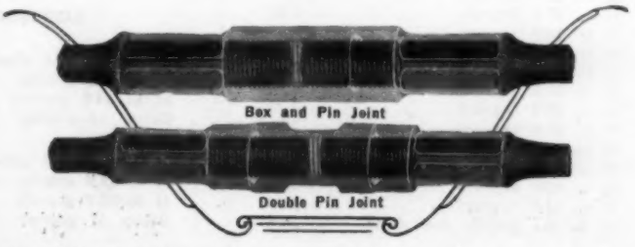
The addition of a perfected joint that eliminates undue pin breakage (no Sheffield Sucker Rod has ever in actual service broken at the pin) gives to the Oil Industry a rod that is effecting sustantial savings in the cost of pumping.

SHEFFIELD SUCKER RODS

are manufactured in both the Box and Pin and Double Pin types. Three sizes ⅝", ¾" and ⅞" are available. Large stocks are on hand for immediate shipment.

SHEFFIELD STEEL MILLS
KANSAS CITY BOLT & NUT CO.
KANSAS CITY, MO.

Manufacturers of Blue Annealed Sheets, Open Hearth Steel Merchant Bars, New Billet Reinforcing Bars, Rail Steel Reinforcing Bars, Steel and Wrought Iron Forgings, Open Hearth Forging Billets, Machine and Carriage Bolts, Hot Pressed Nuts, Lags, Sucker Rods, Pull Rods, Track Spikes, Rivets, Etc.



Say you saw it in The Oil Weekly

CRUDE OIL PRICE QUOTATIONS

Crude Price Changes

July 22.—Effective this morning the Grayburg Pipe Line Company announced the same gravity schedule for Somerset crude as applies to North and Central Texas.

Current Postings

EASTERN STATES

	July 29 1925	Aug. 3 1924
New York Transit	$3.90	$3.25
Bradford (Pa.)	3.90	3.25
Gains	3.45	...
Other Pa. Grades	3.75	3.00
Cabel	2.35	1.60
Ragland	1.30	1.00
Corning	2.25	1.90
Somerset, medium	2.45	1.70
Somerset, light	2.60	1.85

CENTRAL STATES

Illinois	$2.12	$1.62
Indiana	2.13	1.63
Lima	2.33	1.83
Plymouth	1.65	1.00
Princeton	2.02	1.62
Waterloo	1.10	1.10
Wooster	2.35	1.75

WESTERN KENTUCKY

Posted by Indian Refining Company for crude from Allen, Warren, Franklin, Davies, Barren, Cumberland and Monroe Counties

36 and above	2.05	1.75
33 to 35.9	1.95	1.65
32.9 and below	1.85	1.55

CALIFORNIA

(Crude oil prices at well)
Los Angeles and Orange Counties

14 to 19.9 gravity	$1.25	$1.00
20 to 20.9 gravity	1.27	1.01
21 to 21.9 gravity	1.30	1.02
22 to 22.9 gravity	1.33	1.03
23 to 23.9 gravity	1.36	1.05
24 to 24.9 gravity	1.40	1.07
25 to 25.9 gravity	1.44	1.10
26 to 26.9 gravity	1.48	1.13
27 to 27.9 gravity	1.52	1.16
28 to 28.9 gravity	1.56	1.19
29 to 29.9 gravity	1.60	1.22
30 to 30.9 gravity	1.64	1.25
31 to 31.9 gravity	1.68	1.28
32 to 32.9 gravity	1.72	1.31
33 to 33.9 gravity	1.76	1.34
34 to 34.9 gravity	1.80	1.37
35 gravity and above	1.85	1.40
Fuel Oil	1.65	1.40

Rosecrans Field

36 to 36.9 gravity	$1.92
37 to 37.9 gravity	2.00
38 to 38.9 gravity	2.08
39 to 39.9 gravity	2.16
40 to 40.9 gravity	2.24
41 to 41.9 gravity	2.32
42 and above	2.40

MID-CONTINENT

Prairie, Sinclair, Texas, Gulf

28 to 28.9 degrees	$1.40	...
29 to 29.9 degrees	1.48	...
30 to 30.9 degrees	1.56	...
31 to 31.9 degrees	1.64	...
32 to 32.9 degrees	1.72	...
33 to 33.9 degrees	1.80	...
34 to 34.9 degrees	1.88	...
35 to 35.9 degrees	1.96	...
36 to 36.9 degrees	2.04	...
37 to 37.9 degrees	2.12	...
38 to 38.9 degrees	2.20	...
39 to 39.9 degrees	2.28	...
40 to 40.9 degrees	2.36	...
41 to 41.9 degrees	2.44	...
42 to 42.9 degrees	2.52	...
43 to 43.9 degrees	2.60	...
44 Baume gravity and above	2.68	...

(Magnolia Petroleum Co.)

	July 29 1925	Aug. 3 1924
Under 28 gravity	1.00	...
28 to 30.9 gravity	1.35	...
31 to 31.9 gravity	1.64	...
32 to 32.9 degrees	1.72	...
33 to 33.9 degrees	1.80	...
34 to 34.9 degrees	1.88	...
35 to 35.9 degrees	1.96	...
36 to 36.9 degrees	2.04	...
37 to 37.9 degrees	2.12	...
38 to 38.9 degrees	2.20	...
39 to 39.9 degrees	2.28	...
40 to 40.9 degrees	2.36	...
41 to 41.9 degrees	2.44	...
42 to 42.9 degrees	2.52	...
43 to 43.9 degrees	2.60	...
44 Baume gravity and above	2.68	...

NORTH AND CENTRAL TEXAS

(Humble Oil & Refining Co.)
(The Texas Company)

For Ranger, North Texas, Mexia, Powell, Richland, Wortham, Lytton Springs, Currie and Moran Crude.

28 to 28.9	1.40	...
29 to 29.9	1.48	...
30 to 30.9	1.56	...
31 to 31.9	1.64	...
32 to 32.9	1.72	...
33 to 33.9	1.80	...
34 to 34.9	1.88	...
35 to 35.9	1.96	...
36 to 36.9	2.04	...
37 to 37.9	2.12	...
38 to 38.9	2.20	...
39 to 39.9	2.28	...
40 to 40.9	2.36	...
41 to 41.9	2.44	...
42 to 42.9	2.52	...
43 to 43.9	2.60	...
44 and above	2.68	...

SOUTH TEXAS

Mirando (Texpata)	1.00	.80
Mirando (Magnolia)	1.00	.75

SOMERSET

(Grayburg Pipe Line Company)

28 to 28.9 gravity	$1.40	...
29 to 29.9 gravity	1.48	...
30 to 30.9 gravity	1.58	...
31 to 31.9 gravity	1.64	...
32 to 32.9 gravity	1.72	...
33 to 33.9 gravity	1.80	...
34 to 34.9 gravity	1.88	...
35 to 35.9 gravity	1.96	...
36 to 36.9 gravity	2.04	...
37 to 37.9 gravity	2.12	...
38 to 38.9 gravity	2.20	...
39 to 39.9 gravity	2.28	...
40 to 40.9 gravity	2.36	...
41 to 41.9 gravity	2.44	...
42 to 42.9 gravity	2.52	...
43 to 43.9 gravity	2.60	...
44 or above gravity	2.68	...

GULF COAST

Grade "A"	1.75	1.50
Grade "B" at Blue Ridge, Hull and Pierce Junction	1.50	1.30

LULING

Based on Contract	1.15	.90
Lockhart	2.00	...

LOUISIANA-ARKANSAS

Caddo

38 gravity and above	2.20	1.35
35 to 37.9 gravity	2.10	1.25
32 to 34.9 gravity	2.00	1.15
Below 32 gravity	1.85	1.00

Homer

35 gravity and above	1.95	1.35
33 to 34.9 gravity	1.85	1.25
31 to 32.9 gravity	1.75	1.15
Below 31 gravity	1.60	1.00

Cotton Valley

	July 29 1925	Aug. 3 1924
All Grades	1.10	.90

Haynesville

33 gravity and above	1.85	1.25
Below 33 gravity	1.75	1.15

Bull Bayou

38 gravity and above	2.00	1.30
35 gravity to 37.9	1.85	1.15
32 to 34.9 gravity	1.70	1.00
De Soto crude	2.05	1.35
Crichton	1.85	1.15
Bellevue	1.90	1.25
Jennings	1.90	1.75
Vinton	1.90	1.75
Edgerly crude	1.90	1.35

Smackover

Atlantic, Shreveport-Eldorado

28 and above	1.40	...
27 to 27.9	1.35	...
26 to 26.9	1.30	...
25 to 25.9	1.25	...
24 to 24.9	1.15	...
23 to 23.9	.95	...
Below 23	.90	...

The Texas Company

26 gravity and above	1.35	...
24 to 25.9	1.05	...
Below 24	.85	...

Standard—Gulf

27 and above	1.35	...
26 to 26.9	1.30	...
25 to 25.9	1.25	...
24 to 24.9	1.15	...
Below 24	.85	...

Louisiana Oil Refining Corporation

28 and above	1.40	...
27 to 27.9	1.35	...
26 to 26.9	1.30	...
25 to 25.9	1.25	...
24 to 24.9	1.15	...
23 to 23.9	.95	...
Below 23	.85	...

El Dorado

33 gravity and above	1.85	1.35
Below 33 gravity	1.75	1.25
East Field (Calion)	.85	.60

Stephens District

26 gravity and above	1.55	...
Below 26 gravity	1.35	...

WYOMING-MONTANA

Wyoming

Byron	2.25	...
Ferris	1.30	...
Elk Basin	2.15	1.55
Grass Creek	2.15	155
Rock Creek	2.00	1.30
Lost Soldier	1.35	...
Lance Creek	2.15	1.50
Mrle Creek	1.25	.70
Notches	.65	...
Big Muddy	2.00	1.10
Salt Creek	2.00	1.35
Osage	2.15	1.65
Hamilton Dome	1.80	1.35
Pilot Butte	1.75	1.00
Torchlight-Greybull	2.15	1.55
Lander	.85	.45

Montana

Sunburst	1.55	.93
Cat Creek	2.15	1.70

NEW MEXICO

Hogback	2.20	...

CANADIAN CRUDE

Oil Springs	2.80	2.30
Petrolia	2.73	2.23

*Bounty on Canadian crude is ¾ cent per gallon, or 26¼ cents per barrel.

SINCLAIR OILS

THE SINCLAIR dealer is more than merely a customer of the Sinclair Refining Company. With each sale to him there goes the assurance of our help in his own selling problems, whenever he requests it. He is related to us as one Sinclair Department is to another.

The rapid growth of the Sinclair Refining Company is due largely to our close alliance with dealers. We can only grow as Sinclair dealers grow.

SINCLAIR REFINING COMPANY

NEW YORK
Sinclair Oil Bldg., 45 Nassau St.
Telephone: Rector 9320

CHICAGO
22nd and Rockwell Streets
Telephone: Crawford 2000

Cable Address: "Lucent"

Wildcat Indicates Extension Of West Texas Shallow Area

Breckenridge, Texas.—The shallow oil and gas sands extending across Callahan, Shackelford and into parts of Throckmorton County were found to be productive in the southeast corner of Haskell County last week when H. H. Adams and associates' wildcat on the T. Proctor ranch, A. Rodriguez survey, developed a flow of more than three million cubic feet of dry gas from sand at 1662-70 feet, and later went into an oil bearing sand around the 1700-foot level. Casing is being lowered to the top of the oil sand, which furnished several bailers of oil when given a preliminary test, and drilling will be resumed before the end of the week. This wildcat is the most encouraging strike made to date in Haskell County, and serves to widen the shallow oil and gas belt extending across Central West Texas towards Burkburnett and Electra fields. The nearest oil and gas production to this wildcat is about 15 miles to the northeast in Throckmorton County, and about the same distance to the southeast in Shackelford County.

A deeper oil producing horizon was added to the shallow pool in Shackelford County known as the Tannehill-Albany area when the Hope Petroleum Company's W. D. Reynolds 3 pumped at rate of 75 barrels daily from sand at 1291-98 feet. This discovery will result in a number of small pumpers in the upper sand being drilled deeper. The Texas Pipe Line Company is serving the producers in this pool, with a small line from Moran.

The recent discovery of shallow oil production near the townsite of Cross Plains in southeastern Callahan County by Mook-Wakefield and Canyon Oil & Gas Company's McDonough 1, which flowed 120 barrels natural at 1427-34 feet, has stirred up new interest in shallow sands in this general section of the county. The White Eagle Oil and Refining Company of Kansas City has contracted to drill three shallow tests on the Williams land, B. O. L. survey, and has started its first test in section 64.

The Barney Carter pool in lower Stephens County maintained a daily average of 1215 barrels from ten wells last week, as compared to 11,000 barrels less than two months ago, and is practically defined for production.

Rock Island Plow Company Increases Capital Stock

Rock Island, Ill.—To permit of more extended trade relations and greater distribution of the well-known Rock Island Plow Company line of oil field equipment, the Rock Island Plow Company recently announced an increase in capital stock amounting to $1,000,000.

At a recent meeting of the stockholders of the company much satisfaction was expressed at the continued improved condition of the company's business during the past season. The additional issue of preferred stock was sold at par and paid for in cash by present stockholders.

COMPLETIONS FOR PAST WEEK IN U.S. FIELDS

Summarized Review of Field Results

State—	Completions This Week	Completions Last Week	Producers This Week	Producers Last Week	Gas Wells This Week	Gas Wells Last Week	Failures This Week	Failures Last Week	Initial Product'n This Week	Initial Product'n Last Week
Arkansas	58	54	49	44	7	5	2	5	28,285	19,260
California	29	23	27	23	1	..	1	..	15,990	14,200
Colorado	..	2	..	1	..	..	..	1	....	100
Indiana	4	..	2	..	1	..	1	..	90	.....
Illinois	5	3	3	3	..	..	2	..	64	101
Kansas	39	45	28	31	..	2	11	19	3,527	6,160
Kentucky	37	..	26	..	3	..	8	..	225	.....
Louisiana	9	5	5	2	1	1	3	4	1,400	20
Montana	..	11	..	9	..	..	..	2	....	1,630
New Mexico	..	3	...	2	..	..	..	1	....	105
New York	6	8	6	8	..	..	..	..	12	18
Ohio	40	19	28	13	5	2	7	4	639	79
Oklahoma	87	91	46	57	6	10	35	24	8,877	11,031
Pennsylvania	59	56	52	48	5	6	2	2	131	160
Tennessee	1	..	..	..	1	..	..	..	.....	.....
Texas	151	123	89	78	4	5	58	40	21,738	8,449
West Virginia	39	51	5	24	26	16	8	11	75	263
Wyoming	20	15	19	15	1	..	..	..	1,229	1,240
Totals	584	510	385	357	61	48	138	146	82,282	62,906

NOTE—Following is the explanation of abbreviations, signs, etc., used in completion and wildcat reports: *—dry hole, abandoned well; ‡—salt water; †—junked and abandoned; ¶—million cubic feet of gas; abn—abandoned; bbls—barrels; b. s.—basic sediment; cas—casing; co—cleaning out; dk—derrick; dr—drilling; fsh—fishing; ft—feet; in—inches; lcn—location; m—milling N. S. E. W.—North, South, East, West; r—reaming; sd—shut down; sdtr—sidetracking; sp—spudding; sr—straight reaming; std—standardizing; sw—salt water; td—total depth; ur—under reaming; wo—workover; wosr—waiting on standard rig.

Texas

ARCHER COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
Archer Oil Corp. L. H. Farmer 4-D	30	1473
Barkley-Meadows et al L. F. Wilson 8	160	1524
Roy I. Carter et al Parkey 1-B	30	1715
Consolidated Oil Co. et al L. F Wilson 2	*	1470
Consolidated & Cosden et al Cowan 1	*	1855
Empire Gas & Fuel Co. Anderson 2	40	1426
L. F. Wilson 23-C	85	1616
C. C. Fletcher and E. W. Carter Cowan 1	*	1600
W. Franklin et al Parrish 13-A	25	1614
Gulf Prod. Co. M. Wear 1-A	20	1285
J. F Rogers 6-A	40	1338
L. W. McCrory-Wilson 1	*	1411
E. S. Monohan 13	90	1280
Humble Oil & Ref. Co. B. Wisdom 1	*	1490
T. G. Lomax et al L. F. Wilson 1	115	1526
McCarty Oil Co. L. F Wilson 7-B	30	903
L. F. Wilson 8-B	25	908
Magnolia Pet. Co. Vic Stampfli 12	5	1380
Cliff Mooers et al Ickert 4	*	1230
W. M. Moore et al Rogers 4	*	1300
Muse-Robertson et al Wilson 1	*	1420
Murchison-Fain Oil Co. Anderson 1	80	1438
Murchison-Fain & Marland Oil Co. Echols 1-C	*	1315
J. D. Nantz et al L. F. Wilson 1	*	1650
Norday Oil Co. Anderson 3-A	125	1416
Anderson 4-A	40	1422
Waite Phillips Co D. L. Wolf 3	*	1803
Riner-Bailey et al Wilson 26-B	†	1618
Riner-Bailey & Archer Oil Corp. Gose 1	150	1588
Prairie Oil & Gas Co. L. F. Wilson 14-E	60	1587
Simms Oil Co. W. F. Parrish 9	*	1620
Shappell Oil Co. Jackson 22	30	1800
Texhoma Oil & Ref. Co. Taylor 4-A	45	1608
White Eagle Oil & Ref. Co. L. F. Wilson 2	75	1432
Weldon et al Anderson 1	30	1433
W. C. Young et al T. B. Wilson 1.	*	1800

YOUNG COUNTY

Company, Well and Location	Initial Production Bbls.	Depth
Dunn et al Craig Heirs 1	*	4525
Gulf Prod. Co. F. G. Swain 3	100	995
Hinson et al Laquay 1	¶15-50	3938
Humble Oil & Ref. Co. Kilcrease 1	115	1003
Murchison-Fain Oil Co. Hutchings 1	*	1243
Kilcrease 1	*	1030
Murchison-Fain & Litchfield 9-D	550	993
Oxford Oil Co. Kilcrease 1	*	1030
Kilcrease 2	*	1022
Plains Prod. Co. Kilcrease 2	250	1007

Company, Well and Location	Initial Production Bbls.	Depth
Kilcrease 3	485	998
Simms Oil Co. Cheeves 4	80	1022
SOUTH VERNON		
Atlantic Oil Prod. Co. Sigler-Waggoner 1	30	2041
Humble Oil & Ref. Co. Stephens 22	25	2027
Stephens 27	50	2301
McCamey-Sherrin & Lucey Stephens 15	45	1325
Oklahoma-Texas O. & R. Co. Bowers 2	*	1361
Petroleum Producers Co. Dill 3	190	2301
SHACKELFORD COUNTY		
Hope Pet. Co. Reynolds 3	75	1298
BURKBURNETT		
Ascot Oil Co. Roller 30	*	1015
Bonchil Oil H. Beach 12	25	986
A. D. Robinson et al Roller 11	*	1035
ELECTRA		
Gulf Prod. Co. S. Mitchell 1-A	80	1304
Hammon et al McCarty 7-A	20	1205
Miller 1	*	1605
Maer-Staniforth et al Roberts 1, sec 10	*	2003
W. A. Patterson et al Fisher 3	25	1583
Perkins-Cullum et al Burnett 1	*	2000
Ridgeway et al Powell 2	*	2110
Texhoma O. & R. Co. Burnett 1-J	*	725
Waggoner 1-C	*	2001
K-M-A AND IOWA PARK		
Hawkins-Hester et al Watkins 10-A	40	1216
John W. Hooser et al Mitchell 5-A	*	1518
Mitchell 6-A	*	1610
Mitchell 3-B	*	1545
O'Donohoe & Gates A. & K. 4-B	125	1648
Petroleum Co. A. & K. 7-B	200	1648
A. & K. 8-B	150	1648
K. & K. 1	*	1850
Underwood Drilling Co. Pace 4	45	1787
White Eagle O. & R. Co. Hooks 3.	*	1817
EASTLAND COUNTY		
Keough et al Gooch 1	*	3685
Magnolia Pet. Co. Allman 5	50	1496
Reeves & Meredith Leveridge 1	†	1100
Root et al Lee 1	¶2-40	2398
Rosell Prod. Co. Pettit 3	250	1486
McMinn 4	35	1505
STEPHENS COUNTY		
Carter-Thomason et al Langford 5	150	3544
Landreth Prod. Corp. Gratz 2	†	3175
Little et al Drake 2	†	3650
Petroleum Operators Assn. Norton 1	*	935
Price & Russell et al Bruce 4	*	4004
Texas Pacific Coal & Oil Co. Binney 55	75	1900
Thompson et al Williams 4	50	2081
Williamson et al Maxwell 1	*	500
NORTH-CENTRAL TEXAS		
Richland—		
Atlantic Oil Prod. Co. Mrs. M. Talley 1	150	3500
The Sun Oil Co. Swink 1-B	¶	3001
Powell—		
De Arman et al's Bailey 1	32	1660
Humble Oil & Ref. Co. Ramsey 16-A	15	1625
Simms Oil Co. Kellum 6	255	2875
Tidal Oil Co. Phillips 14	*	1625
Wortham—		
Humble Oil & Ref. Co. Crouch 1-B	*	3060
Stubbs 6-A	15	3010
SOUTH LOUISIANA		
Vinton—		
Gulf Ref. Co. of La.'s Vincent 39	1200	3060
G. & N. G. 63	25	2550
Wilson-Broach Co. Parks 3, wo	65	2475
GULF COAST		
Batson—		
Paraffine Oil Co.'s Heywood 32	10	845
Saratoga—		
Regna Oil Co.'s Ogden 7	6	1375
Sour Lake—		
Yount Lee Oil Co.'s Gilbert 1	450	4000

Company, Well and Location	Initial Production Bbls.	Depth
South Liberty—		
Gulf Prod. Co.'s Fantoine 2	850	3450
Richardson 4	100	3525
Deussen Fee 6 "A"	600	3350
Peer Oil Co.'s Harrison 7	75	3430
Hoffer Oil Co.'s Pickett 1	200	3650
Brownie-Babbette Oil Co.'s Mitchell 1	*	4325
Geiss & Ratcliff's Mitchell 1	*	3650
Sinclair Oil & Gas Co.'s Condict Fee 3	1600	3450
Long Point—		
Gulf Prod. Co.'s Davis Trustee 3	*	3950
Orange—		
Humble Oil & Ref. Co.'s Chesson B-21	*	3350
Winifree 11	100	3150
Continental Oil Co.'s Chesson 14	1250	4600
Goose Creek—		
Gulf Prod. Co.'s Ashbell-Smith 4, wo	*	2550
Beaumont Pet. Co. 31	200	2800
Gulf Coast Oil Co.'s Gaillard 21 Acres 16	60	2900
Hull—		
Gulf Prod. Co.'s Morris Phillips 20	45	4100
Republic Prod. Co.'s Dolbear 61 wo	125	1450
The Texas Co.'s Hannah 4	250	3380
Mecom Oil Co.'s Taylor 8, wo	250	4225
GULF COAST		
Goose Creek—		
Gulf Production Co. No. 4 Ashbel-Smith		2550
No. 31 Bmt Petroleum Co.	200	2800
Gulf Coast Oil Co. No. 16 Gaillard	60	2900
Hull—		
Gulf Prod. Co. No. 20 Morris Phillips	45	4100
Republic Production Co. No. 61 Dolbear	125	1450
The Texas Co. No. 4 Hannah	250	3380
Meconi Oil Co. No. 8 Taylor	250	4225
Liberty—		
Gulf Prod. Co. No. 2 Faritone	850	3450
No. 4 Richardson	100	3625
No. 6 Deussen Fee A	600	3350
Peer Oil Co. No. 7 Harrison	75	3430
Hoffer Oil Co. No. 1 Pickett	200	3650
Brownie Babbett Oil Co. No. 1 Mitchell		4325
Seiss Y Ratcliff No. 1 Mitchell		3650
Sinclair Oil & Refining Co. No. 3 Condit Fee	1600	3450
Long Point—		
Gulf Production Co. No. 3 Davis Trustee		3950
Orange—		
Humble Oil & Refining Co. No. 21 Chesson B		3350
No. 11 Winfree	100	3150
Continental Oil Co. No. 14 Chesson	1250	4600
Vinton—		
Gulf Refining Co. of Louisiana No. 39 Vincent	1200	3060
No. 63 G. & N. G.	25	2550
Vinton Petroleum Company No. 4 Rescue Acres		1740
Wilson Broset Co. No. 3 Parks	65	2475
Saratoga—		
Regna Oil Co. No. 7 Ogden	6	1375
Batson—		
Paraffine Oil Co. No. 32 Heywood	10	845
Sour Lake—		
Yount Lee Oil Co. No. 1 Gilbert	450	4000
CENTRAL TEXAS		
Richland—		
Atlantic Oil Prod. Co. Mrs. M. Tolley	150	3000
Sun Co. No. 1 Swink	¶12	3001
Powell—		
De Arman et al No. 1 Bailey	32	1660
Humble Oil & Refining Co. No. 16 Ramsey A	15	1625
Simms Oil Co. No. 6 Killum	255	2875
Tidal Oil Co. No. 14 Phillips		1625

Company, Well and Location	Initial Production Bbls.	Depth
Wortham—		
Humble Oil & Refining Co. No. 1 Crouch B		3060
No. 6 Stubbs A	15	3010
TEXAS MISCELLANEOUS		
Lockhart—		
Gulf Prod. Co.'s Cardwell 3	500	
C. N. Cope's Beaty 3	250	
Brownlee & Pope's Beaty 5	100	1250
Mirando—		
Crown-Central Oil Co.'s Garcia 19	60	
20	60	
21	75	

Mountain States

Company, Well and Location	Initial Production Bbls.	Depth
Lost Soldier District—		
Producers & Refiners Wertz Dome 7	¶6	2270
Salt Creek Field—		
Wyoming Associated No. 8-A Sec. 14-40-79	10	2285
No. 19-A, Sec. 22-40-79	10	2145
No. 34-A, Sec. 35-40-79	10	1348
No. 31-A, Sec. 24-40-79	675	1100
No. 16-A, Sec. 24-40-79	15	1672
No. 31-A, Sec. 26-40-79	5	1505
No. 13-A, Sec. 27-40-79	10	1550
Midwest Oil Co. No. 15-A, Sec. 23-40-79	5	1503
No. 24-A, Sec. 1-39-79	20	1910
No. 21-A, Sec. 23-40-79	10	1538
No. 21-A, Sec. 11-49-79	25	2466
Midwest Oil & Wyo. Asso. No. 24-A, Sec. 25-40-79	50	1870
No. 25-A, 36-40-79	30	1863
Mountain & Gulf Oil Co. No. 12, 12-40-79	25	2440
No. 18-A, Sec. 13-40-79	225	2098
No. 6-A, Sec. 6-39-78	42	2038
Salt Creek Consolidated No. 1, Sec. 31-40-78	15	1230
No. 31-A, Sec. 31-40-78	10	1911
Wyoming Oil Fields Co. No. 7, Sec. 23-40-79	15	1103

Kansas

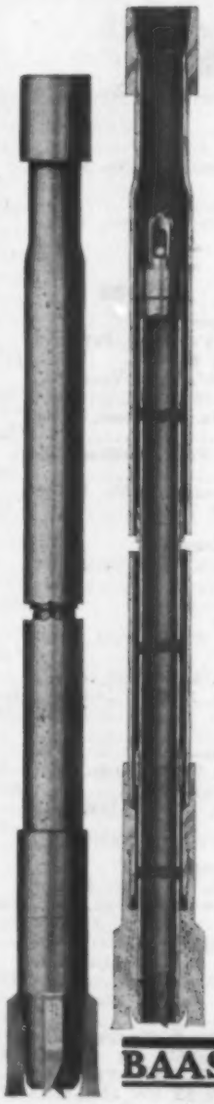
Company, Well and Location	Initial Production Bbls.	Depth
Butler County—		
Ramsey & Clark's No. 1 Patterson, C E L SW NE 8-26-5	125	2435
Leonard Pet. Co.'s No. 3 Vann, NEc NW NE 32-26-5	30	2731
Travis et al's No. 5 Knotson, C NE NW 11-27-5	25	2719
Branson et al's No. 2 Boedless, NEc SE NE 5-27-6	10	2790
Phillips Petroleum Co.'s No. 1 Tobbins, NEc NW 16-27-6	10	2650
Chautauqua County—		
Standard Oil Co.'s No. 5 Jones, NWc NE 1-34-10	25	1523
Elk County—		
Pure Oil Co.'s No. 3 Webb, NWc SW 13-31-10	80	1554
No. 2 Webb, NEc NW SE 14-31-10	75	1361
No. 3 Chaffine, NWc SE 14-31-10	100	1356
No. 4 Chaffine, NEc SE 14-31-10	85	1356
Russell County—		
Derby Oil Co.'s No. 1 Sutton, SWc NW SW 5-12-15w	400	2790
No. 4 Sutton, SEc NE SW 5-12-15w	70	2790
Woodson County—		
Empire G. & G. Co.'s No. 5 Bahr, NWc NE NW 23-23-13	25	1653
Cowley County—		
Lewis Oil Co.'s No. 5 Robbins, SEc NW SW 31-30-6	312	2895
Trees Oil Co.'s No. 3 Shaffer, NWc SE NE 10-31-3	45	3009
Marland Oil Co. & Neely's No. 4 Rockwell, NEc SW NE 13-32-4	595	2571
Waite Phillips & Marland's No. 2 Thurlow, SWc SE SW 17-33-3	150	3267
Wagner et al's No. 1 Erickson, C NE NW NE 5-30-8	*	2135
C. E. Roth's No. 1 Brant, SWc NE SE NW 30-13-5	*	3439
Terrian & Bellanies's No. 1 Higgenbottom, SWc SE SW 29-31-6	*	3004

Company, Well Location—	Initial Production Bbls.	Depth
Southwestern Gas Co.'s No. 1 Shields, SEc NE 18-32-6	*	2275
Kanotex Refining Co.'s No. 1 Whitney, NEc SW NW 32-34-4	*	1670
Greenwood County—		
Davis Hazlett's No. 6 DeMalorie, SEc NE SE 12-22-10	300	2122
Skelly Oil Co.'s No. 3 Warrenbury, SWc NE NW 13-22-10	10	2175
White Eagle's No. 3 Kipfer, SWc NW NE 13-22-10	70	2119
Sinclair O. & G. Co.'s No. 21 Browning, NWc SE SE 19-22-10	200	2387
Titus et al's No. 1 Browning, NEc NW NE 30-22-10	200	2462
Syndicate Oil Co.'s No. 6 Clark, C E L SW NE 28-22-11	10	1980
York State Oil Co.'s No. 4 DeMalorie, NEc NW 32-27-11	150	1989
Greenland Oil Co.'s No. 8 Green, NWc NE NE 10-23-9	150	2386
Greenland Oil Co.'s No. 9, SWc NE SE 10-23-9	100	2372
Phillips Pet. Co.'s No. 9 Edwards, NEc SW SE 13-23-10	50	2142
Phillips Pet. Co.'s No. 15 McKee, SWc 32-23-10	125	2369
McGinnis et al's No. 1 Hess, NWc SW NW 5-22-11	*	2102
Empire G. & F. Co.'s No. 4 Creegan, SWc NW NW 32-22-11	*	2040
Rhodes & Abell's No. 1 Hover, SWc NW 24-23-11	*	1957
Ward McGinnis's No. 1, NEc SW 23-23-12	*	1808
Richey & Moore's No. 1 Wasson, NEc 33-23-12	*	2385
Parkin et al's No. 1 City National Bank, SWc 7-25-12	*	1881

Oklahoma

Company, Well and Location	Initial Production Bbls.	Depth
Kay County—		
Herbert Oil Co.'s No. 2 Townsite, SWc SE SW 5-28-1w	35	2342
Tidal Oil Co.'s No. 1 Boggs, SEc SE 8-27-1w	¶	3472
Wentz Oil Corp.'s No. 1 Mahoney, C E L NE SE 28-25-1w	*	1010
Cotton County—		
Consolidated Oil Co.'s No. 1 Henderson, SWc NE NW 26-4s-10w	*	2314
Garfield County—		
Sinclair O. & G. Co.'s No. 9 Crews, C NE SW 30-22-3w	30	1218
Jefferson County—		
Pauline O. & R. Co.'s No. 1 Garner, C NE SW 17-5s-8w	*	3012
Pawnee County—		
Magnolia Pet. Co.'s No. 5 Schoolland, SEc SW SE 16-20-6	25	3071
McMahon Oil Co.'s No. 2 Hennessey, NEc NW SW 24-20-8	180	2772
Southwestern Oil Fields Co.'s No. 16 Wasson, C S L SW NW 24-20-8	100	2759
Prairie O. & G. Co.'s No. 2 Ham, C NW NW NW 15-20-7	20	1884
Creek County—		
Aztec Oil Co.'s No. 5 Johnson, C SE SE 14-17-8	60	2320
Olean Pet. Co.'s No. 6 Washington, NEc SW SW 32-17-8	940	3472
Okla. Natl. Gas Co.'s No. 1-A Marchla, NWc NW SE 6-15-7	¶	3645
Hall & Donnelly's No. 3 Johnson, SWc SE SW 17-14-10	150	3432
Billingsley et al's No. 1 Woodfork, NEc 18-18-9	*	3290
Pulaski Oil Co.'s No. 1 Long, NEc SW 6-14-9	*	4150
Pontotoc County—		
Smith & Lancaster's No. 1 Norris, SWc SE 34-4-6	5	1392
Hughes et al's No. 1 Faulkner, C SW NE 28-4-7	5	733
American O. & R. Co.'s No. 1 Snackard, C SE NE 33-5-6	*	1650
Dixie Oil Co.'s No. 1 Filmore, SEc SW NW 33-3-4	*	1130
Kiowa County—		
C. E. Reynolds' No. 1 Smart, C E½ SE 12-6-17w	10	460
Caddo County—		
English Drlg. Co.'s No. 1 Abernathy, SWc SE SE 31-6-9w	50	2384
Grady County—		
Bob Sultan's No. 3 Clay, NEc SW SE 15-5-7w	¶	4954
Garvin County—		
Texas Pacific C. & O. Co.'s No. 2 Derbyn, NEc SE NE 18-1n-3w	*	3880
Okfusgee County—		
Burk Gries' No. 2 Bruner, C NW SE SE 16-10-9	1250	3291
Amerada Pet. Corp.'s No. 4 Harjo, C SW SE SW 36-10-9	¶	3395
Independent O. & G. Co.'s No. 1 Scott, SWc SE SW 33-13-7	*	4535
Bingham & Smith's No. 1 Hayes, SEc SE SE 16-13-8	*	4079
Hughes County—		
Independent O. & G. Co.'s No. 4 Bruner, C SE NE NW 1-9-9	¶	3373
Phillips Pet. Co.'s No. 4 Arber, C NW SE 3-9-9	610	3293
Dixie Oil Co.'s No. 1 Diamond, C SE SE NE 18-8-10	754	3149
Independent O. & G. Co.'s No. 1 Morrison, C SW SE NE 18-8-10	90	3343
Gilcrease Oil Co.'s No. 2 Simon, C NW NE NW 20 9-9	*	3070
Muskogee County—		
Middleton et al's No. 4 Barnett, NWc SE SE 19-16-15	*	1300
J. S. McCutcheon's No. 2 McGilbray, NWc SW SE NE 13-13-15	*	2360
T. E. Neary's No. 1 Evans, SWc SE 15-13-17	*	

The Foster Core Drill



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BRANCHES

LONG BEACH · · · BREA · · · TORRANCE · · · TAFT · · · ROSECRANS

P.O.BOX 694 - HOUSTON, TEXAS - PHONE PRESTON 4270

Company, Well. Location--	Initial Production Bbls.	Depth
Osage County—		
Barnsdall Oil Co.'s No. 13, SW SE SW SE 5-20-12	90	2032
Skelly-Ohiosage's No. 2, SEc SW SE SE 3-21-9	51	2321
Breene et al's No. 9, SE NE SE SW 14-21-10	35	1594
Winona Oil Co.'s No. 14, SE NW SE SE 28-24-10	25	1394
Lewis Oil Co.'s No. 4, SE NW 29-25-8	100	2508
Carter Oil Co.'s No. 9, SW NW SW NW 21-26-6	324	2987
Carter Oil Co.'s No. 11, SEc NW SE NW 21-26-6	453	3000
Carter Oil Co.'s No. 12, SE NE SE NW 21-26-6	573	3005
Phillips Pet. Co.'s No. 1, SW SE 2-27-5	15	3033
No. 3, SE SW NW 12-27-5	250	3038
No. 12, C SE NE NW 12-27-5	200	3020
No. 16, NEc 13-27-5	400	2987
No. 15, C NW NE NW 12-27-5	200	3020
Wiser Oil Co.'s No. 11, NWc NE NW NW 27-29-11	25	996
Sand Springs Home's No. 1, SW SE 32-20-11	*	2555
Continental Oil Co.'s No. 2, NE NW NE SW 28-20-1w	*	2074
The Texas Co.'s No. 1, NW SW 10-25-10	*	2445
Gypsy Oil Co.'s No. 1, SW NE 24-26-5	*	3474
Beacon Oil Co.'s No. 1, NEc 6-28-1w	*	878
Phillips Pet. Co.'s No. 2, NW NE 27-29-11	*	114
Stephens County—		
Winkler et al's No. 4 Bristowe, C NW SE SE 18-2s-7w	*	1927
American Pipe Line Co,'s No. 2 Ketchum, SWc NW 25-1-9w, twin	130	2296
Ka Wye Drlg. Co.'s No. 6 Hines, NWc SW 25-1-9w	50	2285
Skelly Oil Co.'s No. 3 Brighman, NEc NW SW 30-1s-8w	50	2227
Lorraine Pet. Co.'s No. 1 Potts, SEc SW 30-1s-8w	40	2243
Knox Pet. Co.'s No. 1 Isherwood, SEc SE SE 11-2-5w	*	1501
Western Arch Oil Co.'s No. 1 McDonald, NEc SE SE 13-2s-8w	*	2007
Carter County—		
Amerada Pet. Co.'s No. 8 Westheimer, SEc NW 28-5s-1e	56	1224
Iowa Oil Co.'s No. 2 Baptiste, SEc SW NW 28-5s-1e	*	1286
Lincoln County—		
The Texas Co.'s No. 2 Olean, NEc SW SW 2-14-5	285	3365
Selby O. & G. Co.'s No. 4 Bagwell, NEc SE 2-14-5	759	3417
Wilcox & Oswalt's No. 1 Hobson, SWc 16-14-4	*	4161
J. C. Cook's No. 1 Fuquay, SWc NW SE 20-14-4	*	4575
H. F. Wilcox O. & G. Co.'s No. 1 Smith, SEc SW NE 12-12-3	*	4505
Tusa County—		
Thornton et al's No. 16 Berry, SWc NE SE SW 20-19-12	20	2120
S. W. Anthony's No. 1 Gilcrease, SWc 34-17-12 (owd)	¶	1670
Henry Oil Co.'s No. 1 Murry, NEc NW NW 36-17-12	30	2325
Thompson & Black's No. 1 Tingle, C W L NE NW 24-17-12	*	2530
Waggoner County—		
O. A. Sewell's No. 1 Childers, NEc SW SE NE 2-18-16	*	930
Mayes County—		
Swingle's No. 1 Foster, NEc NW SE 27-19-18	*	....
Okmulgee County—		
Continental Oil Co.'s No. 2 Grayson, C NW NW NE 30-12-12	30	1943
E. J. Lambert's No. 3 Freeman, C S L NE NW 7-13-15	¶	735
N. Y. Southern Oil Co.'s No. 1 Barnett, C N L SW 34-16-12	*	2207
Marion's No. 3 Freeman, C SE NW 7-13-15	*	740
Hutchinson's No. 6 Berryhill, SEc SW NW 20-14-13	*	2896
J. Wallace's No. 1 Rentie, SWc SE SW 11-14-14	*	2470
Seminole County—		
Gypsy Oil Co.'s No. 6 Fixico, C NW NW 4-10-8	300	3416
Cosden & W. Phillips' No. 5 Williams, C NW NW SE 33-11-8	75	3469
Prairie O. & G. Co.'s No. 4 Lester, C NE SE SE 32-11-8	6	3473
Central National Oil Co.'s No. 1 Harjo, C NE SW NE 14-11-7	*	3750
Carter Oil Co.'s No. 1 Little, C NW SW NE 10-10-8	*	3492

Arkansas

Company, Well, Location—	Initial Production Bbls.	Depth
Smackover Field Ouachita County—		
Gulf Ref. Co.'s Scott 1, 34-15-15	¶30	2681
Umstead A-10, 33-15-15	400	2371
Houston Oil Co.'s B. T. Laney 10, 31-15-16	250	2568
Humble O. & R. Co.'s Arnold 1, 26-15-16	80	2300
Farris 3, 34-15-15	170	2410
Lion O. & R. Co.'s Hays 4, 4-16-15	250	2390
Marine Oil Co.'s Hays 6, 4-16-15	375	2405
Snyder 9, 34-15-15	400	2371
J. H. Meek Trust's Laney 5, 31-15-15	30	2600
Penguin Oil Co.'s Hardin 2, 27-15-16	325	2256
Phillips Pet. Co.'s Laney 9, 31-15-15	250	2559
Joyce 7, 33-15-15	¶20	2296
Pure Oil Co.'s Brister 8, 28-15-15	500	2452
Roxana Pet. Corp.'s Williams 2, 34-15-15	300	2378
Simms Oil Co.'s Hirsch 5, 31-15-15	250	2590
Standard Oil Co.'s McClanahan 10, 6-16-15	500	2397
H. Murphy 10, 5-16-15	120	2378
H. Murphy 15, 5-16-15	55	2395
Umstead 19, 32-15-15	175	2375
Umstead 20, 32-15-15	400	2380
The Texas Co.'s Berry 11, 33-15-15	7000	2385
Umstead et al's Fee 2, 4-16-15	300	2370
Smackover Field, Union County—		
Amerada Pet. Corp.'s Flenniken 10, 6-16-15	¶35	2675
Arkansas Fuel Oil Corp.'s Ferguson 8, 6-16-15	25	2390
Federal Pet. Co.'s Lawton A-13, 10-16-15	¶30	2673
Gulf Ref. Co.'s Cook 5, 16-16-15	500	2468
Flenniken 13, 5-16-15	240	2370
Flenniken 14, 5-16-15	300	2388
Flenniken 15, 5-16-15	1800	2382
H. Murphy 26, 4-16-15	180	2390
H. Murphy 32, 3-16-15	100	2386
T. C. Murphy 17, 9-16-15	200	2406
T. C. Murphy 18, 9-16-15	300	2432
J. J. Scott 1, 7-16-15	30	2342
Hickman et al's Graves 1, 3-16-15	600	2553
Humble O. & R. Co.'s Goodwin 5, 3-16-15	3000	2378
Lion O. & R. Co.'s Flenniken 7, 10-16-15	350	2410
Graves 6, 3-16-15	¶55	2501
Lawton A-6, 10-16-15	50	2620
Murphy D-4, 8-16-15	1500	2508
Murphy E-3, 8-16-15	1500	2528
Murphy E-4, 8-16-15	400	2500
Wilson 3, 17-16-15	350	2519
O. G. Murphy's T. C. Murphy A-3, 9-16-15	200	2471
Natural Gas & Pet. Corp.'s Murphy A-4, 17-16-15	500	2508
Murphy B-4, 17-16-15	500	2513
Murphy F-4, 9-16-15	¶40	2652
Pure Oil Co.'s Bilyieu 5, 8-16-15	200	2385
Shreveport Oil Corp.'s Murphy A-2, 9-16-15	250	2429
Murphy A-3, 9-16-15	700	2439
Murphy B-2, 9-16-15	300	2464
Standard Oil Co.'s H. Murphy 33, 4-16-15	¶30	2525
Sun Co.'s Hays 15, 3-16-15	250	2369
Hays 17, 3-16-15	30	2370
Thurman et al's Wilson 5, 6-16-15	1500	2396
Unity Pet. Co.'s Bilyieu 6, 8-16-15	300	2463
Total, 56 wells	¶240-28,285	

Eastern States

PENNSYLVANIA

Company, Well, Location—	Initial Production Bbls.	Depth
Bradford Field—		
Nesselson Bros. George 1	4	....
E. A. Potter Park Estate 28	3	....
Potter 3	2	....
R. C. Lloyd Ekas 1	*	....
T. H. Kennedy Co. Bingham 400 tract 130	3	....
Brink & Brink Bingham 10	2	....
T. P. Thompson Franchot 10	3	....
G. W. Crooks Estate Crooks 12	3	....
Jutter Bros. Juetter 11	3	....
Anna W. Palmer Palmer 2	4	....
Thessen & Thessen Thessen 1	2	....
W. C. Kennedy Co. Kennedy 47	2	....
Barry Estate & Co. Barry 2	2	....
C. P. Byron Estate Bingham 568 tract 28	3	....
Elder, Gallup & Co. Lawton 20	2	....
D. & P. Oil Co. Franchot 22	2	....
A. A. Park Park 2	2	....
Wright, Love & Co. Burgess 23	2	....
F. E. Baldwin Baldwin 1	3	....
A. Williams Borden 1	3	....
D. W. Daly Bingham 1	3	....
Bingham 389 tract 38	3	....
H. B. O. Oil Co. Bingham 1	3	....
B. Devlin Devlin 2	3	....
Linwood Oil Co. Chapin 1	3	....
M. L. Boyle Duke 1	3	....
Thomas & Staley Duke 1	3	....
Denwood Oil Co. Garlock 5	3	....
Petroleum Reclamation Pratt 1	2	....
Pratt 2	3	....
Linwood Oil Co. Germer 1	3	....
T. H. Kervin Jr. Kapp 1	3	....
Hope Oil Co. Sill 1	2	....
Sill 2	2	....
J. H Gibson Willett 1	3	....
S. H. Elder & Co. Wright 2	2	....
T. B. Wilson Borden 2	2	....
Borden 3	2	....
C. B. Kervin Backus 1	2	....
Zane Estate-Mehan 1	3	....
Wolfe Oil Co. Reed 1	2	....
Venango County—		
Rhodes & Breene Paul & Simmons 35	3	....
Midland Oil Co. Stevenson 40	2	....
Morck Oil Co. Chamberlain 67	2	....
S. M. Hess & Co. Ziegler 1	2	....
H. B. Trax Trax 33	2	....
H. J. Hoffman Cross 14	2	....
Franklin Trust & Co. Blair 41	2	....
L. & C. Roess Trust Estate McCalmont 16	3	....
H. G. McFadden & Co. McFadden 13	2	....
Clarion County—		
Lewis, Scott & Co. Keister 1	¶1½	....
Alum Rock Gas Co. O'Neil Bros. 2.	2	....
V. C. Dale Williams 1	*	....
Center-Middle Field—		
Pequignot & Co. O'Hara 11	2	....
H. N. Carson Weaver 11	2	....
Beaver County—		
Bruin Oil & Gas Co. Jos. Harris 1.	¶½	....
Pittsburg Parties Frank Veon 1	¶½	....
Allegheny County—		
Walters & Co. Edward Hughes 1	¶2	....
Westmorland County—		
Hoddle Bug Oil & Gas Co. E. R. Cypher 1	¶1¼	....

NEW YORK

Allegany County—		
Allen & Cady Allen 1	2	....
R. M. Brown Brown 1	2	....
Hennifan & Co. Hennifan 1	2	....
Birtcil & Co. Birtcel 1	2	....
J. F. Woodard & Co. Woodard 1	2	....
C. Taylor Taylor 1	2	....

WEST VIRGINIA

Ritchie County—		
Hope Construction & Refg. Co. J. C. Hudkins 1	¶½	....
Mellon Bros. L. A. Cain 2	¶1	....
Carter Oil Co. O. J. Hill 1	¶2	....
O. C. Satterfield S C. Satterfield 1	¶1½	....
Rice O. & G. Co. D. W Bradford 2.	*	....

Company, Well, Location—	Initial Production Bbls.	Depth
Hope Nat Gas Co. Elias Connelly 2	¶1	....
Lincoln County—		
L. R. Sweetland Sweetland 4	¶1½	....
Foote Oil & Gas Co. Sweetland-Pridmore 3	¶½	....
Roy & Osborne F. E. May 1	¶1¼	....
Moore Rock Oil & Gas Co. James Madden 3	¶1½	....
Kanawha County—		
United Fuel Gas Co. Charles Halstead 1	¶1	....
Cabin Creek Gas Co. Ward Hrs. 59	¶2½	....
Mildred Oil & Gas Co. W. H. O'Dell lot 1	¶10	....
Tampico Oil & Gas Co. S. M. Pike 4	¶¼	....
Harrison County—		
Hope Natural Gas Co. John Herbert 1	*	....
Hampton Oil & Gas Co. Isaac Hannah 2	¶3	....
Clargsburg Light & Heat Co. John Patton 1	¶2¼	....
Percy Cork Robert Payne 1	¶2	....
Gilmer County—		
Carter Oil Co. Charles Osborne 1	5	....
Hope Natural Gas Co. E. M. McClain 1	¶2½	....
Albert Vanhorn 1	¶2¼	....
Wood County—		
C. E. Smith Thomas McAfee 5	*	....
Bowers, Ellis & Co. E. E. Johnson 1	3	....
C. S. Reed & Co. John Ashbee 1	*	....
Wetzel County—		
Rawe Bros. W. A. Morgan 2	*	....
Carnegie Natural Gas Co. A. Bartrug 1	*	....
Silver Hill Oil Co. D. W. Wade 2	¶3½	....
Roane County—		
Carter Oil Co. Simmons Heirs 6	¶2	....
United Fuel Gas Co. Wesley T. Roe 1	¶2	....
Lewis County—		
Pittsburg & West Virginia Gas Co. Mose T. Law 1	*	....
Standard Gas Co. Amanda Wolverton 1	¶3	....
Marshall County—		
Wasmuth-Callahan Oil Co. Mary A. Reilly Heirs 4	15	....
Doddridge County—		
Trainer & Travis Francis Douglass 1	50	....
Wirt County—		
W. H. Hays & Co. G. W. Hays 1	2	....
Calhoun County—		
Southern Oil Co. M. Richter 19	¶2½	....
Cabell County—		
Aetna Oil & Gas Co. Hyman McCullough 1	¶¼	....
Monongalia County—		
Cummins & Thomas Elmer E. Knutte 1	¶1½	....
Tyler County—		
S. McCullough & Co. E. B. Jammison 4	¶2	....
Pleasants County—		
Rice Oil Co. Amos Peters 1	*	....
KENTUCKY		
Barren County—		
Fred Moore Howard 5	12	465
Gassaway 3	5	484
Hyland Oil Co. Cassiday 6	5	....
Saunders 3	6	....
Gillespie & Wiggins B. Scott 10	6	650
Houchins Leasehold Co. Mayfield 7	3	520
Porter & Co. Nichols 1	5	462
Harrington & Norris Bros. Evans 8	10	562
Smith & Son Nichols 7	*	495
Esslinger Oil Co. Jones 5	*	450
Allen County—		
Work & Hice Lyle 4	12	273
Simpson & Co. W. C. Cockrill 3	15	298
W. G. Moorman J. W. Frost 13	10	....
H. A. Kiser Jones 4	4	286
Harry A. Miller J. B. Straight 3	*	540
W. F. Baird J. L. Harris 5	*	....
Warren County—		
Dickson & Sledge S. T. Pearson 6	15	371
H. A. Heney Bryant 11	15	1182
Wood Oil Co. Gunn 10	5	1221
H. Z. Clark Gillespie 7	5	1062
Owen, Whitner & Co. Cox 1	*	1100
Johnson-Magoffin Counties—		
New Domain Oil & Gas Co. J. H. Gardner 11	2	....
O. J. Hamlin Jesse Borders 60 acres 2	1	....
Red Rock Petroleum Co. Patrick 3	*	....
Floyd County—		
American Roller Mills Co. Summitt 10	¶3½	....
Louisville Gas & Electric Co. Tandy Martin 2	¶5	....
Ohio Fuel Corp. H. D. Martin 1	¶5	....
Lawrence-Johnson Counties—		
Union Gas & Oil Co. W. D. Lester 5	20	....
David Fox B. R. Hamilton 4	8	....
Cumberland County—		
Alta Oil Co. C. A. Cheatham 3	10	....
McClintock Oil Co. J. M. Hugnes 1	15	....
Wayne County—		
Daugherty & Co. C. W. Burnett 2	20	....
Wood Oil Co. Emma Lad 4	*	....
Owensboro District—		
Spice Knob Development Co. Bert Thompson 3	6	....
Thomas & Co. Heffler 1	*	....
Morgan County—		
Oliver Jenkins Joe Hewart 1	5	....
Lee-Owsley Counties—		
Combs Bros. Development Co. Jack Evans 1	5	....
TENNESSEE		
Putnam County—		
Double Springs Clark & Co. 1	¶2	..
SOUTHEASTERN OHIO		
Noble County—		
H. H. Moseley & Co. L. M. Moreland 1	*	....
Robert Knoltz & Co. Nathan Cisler 1	¶¼	....
L. W. Hesson & Co. C. M. Harper 4	*	....
Speary & Speary John Bettinger 13	3	....
O. O. Kinsey Elmer Hesson 4	2	....
Morgan County—		
Wilbert-Swingle Co. Horace Fletcher 2	¶1	....
R. M. Talbot & Co. D. P. Gardner 7	*	....
Jefferson County—		
Jacob Needles & Co. Dean Creswell 9	¶¼	....
Peters, Heath & Co. Fell Heirs 1	*	....
Washington County—		
Charles Erb & Co. Harvey Scott 5	¶2½	....
CENTRAL OHIO		
Licking County—		
Carter Oil Co. Jacob Vanderbark 5	200	....
Hanover Brick Co. 1	20	....
Pure Oil Co. A. O. Michael 1	130	....
A. H. Heisey Gas Co. A. O. Michael 1	40	....
Farmer & Denbow F N. Wilkins 1	*	....
Spindler & Donaldson C. A. Bounds 12	20	....
Holmes County—		
Empire Gas & Fuel Co. Mary Bridges 1	40	....
Dell Waltman 1	20	....
East Ohio Gas Co. Dave Anderson 4	30	....
Ohio Oil Co. J. J. McCullough 1	*	....
Hocking County—		
Old Tom Oil Co. George Tucker 2	¶½	....
Carter Oil Co. W. H. Mowery 2	5	....
Sunday Creek Coal Co. Hocking Products Co. 127	10	....
Athens County—		
J. F. Graham & Co. J. M. Woods 1	25	....
Knox County—		
East Ohio Prod. & Refg. Co. Shiveley 15	3	....
Perry County—		
Keller & Marshall M. E. & Alvin Keitham 2	2	....
Medina County—		
E. R. Edson & Sons Co. D. B. Dratton 1	*	406
NORTHWESTERN OHIO		
Wood County—		
George W. Hoffman W. & H. Hartman 4	4	1307
John E. Welton & Co. William Budd 3	12	1292
J. T. Montgomery J. J. Faylor 20	5	1452
Shelby County—		
Lee A. Witson J. H. Barhorst 4	10	....
G. B. Willis & Co. Charles Broerman 6	10	....
Hancock County—		
Star & Clark Allice Stauffer 5	10	1317
B. Porter & Co. J. H. McClelland 7	5	1321
Hardin County—		
Roundhead Oil & Gas Co. Jesse Dysart 1	5	1485
Schmidt & Co. James Crossley 2	*	1462
Mercer County—		
D. A. Beatty Peter Alt 2	10	1243
J. W. McIntosh Josephine Fast 3	*	1300
Van Wert County—		
Stelzer & Boyd Thomas E. Jones 2	10	1239
Sandusky County—		
Ohio Oil Co. F. Taulker Sr. No. 2 tract 25	8	1344
INDIANA		
Sullivan County—		
Fred Bays L. M. Bledsoe 1	¶½	....
Hollingsworth & Co. J. L. Harrison 1	*	650
Daviess County—		
Hartman, Sargent & Co. Frank Gamer 1	70	941
Gibson County—		
Murphy Oil Co. of Pa. Alice Fredericks 19	20	760
ILLINOIS		
Wabash County—		
J. S. Young & Co. Clara Armstrong 2	*	1521
J. F. Toomey & Co. G. D. Adams 6	*	1492
Lawrence County—		
Ohio Oil Co. J. L. Kimmell No. 1 tract 55	30	1039
Clark County—		
Preston Rock Oil & Gas Co. Samuel McFarland 1	25	1428
Crawford County—		
John Phipps & Co. Eliza Durman 2	9	961

California

Athens-Rosecrans Fields—		
Associated Oil Co. Wanka 1	1500	4905
G. F. Getty Athens 5	250	4937
Henderson Petroleum Corp. Athens 1	¶7	4215
Julian Pet. Corp. Athens 6	150	4431
Marine Oil Corp. No. 43	*	5319
Kern County—		
Gross Drilling Co. No. 1	1000	3628
Formax Oil Co. No. 20	150	1364
Murphy Coyote—		
Standard Oil Co. Emery 40	50	4400
Huntington Beach—		
California Pet. Corp. Brown 7	75	2865
Midway District—		
Honolulu Cons. Oil Co. No. 73	180	3360
Sunset—		
Atlas Oil Co. No. 7	225	3385
George F. Getty Leutholtz 1	15	2315
California Pet. Corp. Dorothy 3	625	3584
Signal Hill—		
Hall Webber Oil Synd. No. 3	85	4719
Torrance—		
Standard Oil Co. Interstate 4	40	3785
C. C. M. O. Del Amo 103	105	3400
Del Amo 75	425	3506
Security Oil Synd. No. 2 Abercrombie 1	25	3765
General Petroleum Co. Carson 4	125	3349
Pettifils 1	65	3525
Shell Co. Kettler 3	125	3862
Kettler 7	25	3860
Inglewood—		
Standard Oil Co. L. A. Investment 1-21	2360	2673
Vickers 1-13	1545	2621
Vickers 1-14	2015	2593
L. A. Investment 1-20	190	2010
L. A. Investment 1-19	2440	2678
Associated Oil Co. Vickers 22	1700	2617
Shell Co. Rindge 12	500	2239
NORTH LOUISIANA		
Caddo Parish—		
Gulf Refining Co. Tyson 11, 14-21-15	100	1669
McGoldrick et al Murray 7, 14-21-15	10	1630
Waterman Drilling & Dev. Co. Waterman 1, 18-17-16 (Waskom gas field)	¶14	1900
Total, 3 wells	¶14-110	
EAST TEXAS		
Waskom Gas Field—		
Trick Oil Co. Abercrombie 1, R. W. Bedford H/R Survey, Harrison County	¶7	952

WILDCATS FROM ALL SECTIONS

Kansas Wildcats

BARBER COUNTY—R. B. Brown's No. 1, NWc 14-34-11w, skidding rig.

BARTON COUNTY — Cheyenne O. & G. Co.'s Sooy 1, SWc SW 27-12-12w, sd 3525 ft. Haynes et al's Tual 1, NWc 21-12-12w, sd 2100 ft. John Herron's No. 1, SEc NE 22-18-13w, dr 4225 ft. Huffine et al's Smith 1, C NE SW 21-19-12w, dr 1810 ft.

CLOUD COUNTY—Livingston's Murdock 1, SEc 6-6-4w, dr 1985 ft.

GEARY COUNTY — Liberty-Texas' Wright 1, NEc 9-12-6, sd 750 ft. Liberty-Texas' Foster 1, NEc SW 3-12-6, sd 2000 ft.

GRAHAM COUNTY—Keyes Bros. & Marine's Thaxton 1, SEc NW 23-8-24w, r 2000 ft. Gruen & Shiler's Baker 1, NWc SE NW 17-10-24w.

JEFFERSON COUNTY—Northern Counties' Edwards 1, SEc NW NW 13-8-9, sd 3405 ft.

KINGMAN COUNTY—Hale et al's Graber 1, SWc NW 34-27-7w, lcn.

LABETTE COUNTY—Ark. Fuel Oil Co.'s Sparks 1, NEc SE SE 14-31-17, sd 1110 ft.

LINCOLN COUNTY—Equity Oil Co.'s Jellison 1, NWc SE 19-13-9w, dr 3460 ft. Scott & Collins' Stone 1, SEc SW NE 19-11-6w, sd 500 ft.

MITCHELL COUNTY—Wilcox Oil & Gas Co.'s Elder 1, NWc SW NW 23-6-9w, dr 3610 ft.

NEMAHA COUNTY — Nemaha O. & G. Co.'s Meyers 1, NWc 19-3-11. sd 3750 ft.

OSAGE COUNTY—Rodgers & Bittle's Bertha 1, SEc NW 22-17-16, lcn. Mul-Vit Dev. Co.'s Neil 1, NEc NW SW NE 8-17-17, sd 2735 ft. Baker et al's No. 1, C SE SE 3-15-15, sd 260 ft.

RICE COUNTY—Stamey's Barnes 1, SEc NE 21-20-6w, sd 3640 ft. Jasper & Beschka's Walker 1, SWc NE 10-18-6w, sd 2200 ft.

RILEY COUNTY—Pawnee O. & G. Co.'s Marks 1, SEc NE NW 26-10-6, sd 2030 ft.

North Texas Wildcats

COMPLETIONS

Company, Well, Location—	Initial Production Bbls.	Depth
Baylor County—		
John Hooser et al Mills 3.....	*	1500
Shaw-Rathke et al Mills 4	20	1420
Clay County—		
Lone Star Gas Co. Holloway 13 ..	15	1710
Montague County—		
Newblock Oil Co. J. W. Maddox 1.	160	921
Pure Oil Co. Oldham 1	18	900
The Texas Co. I. Gist 4-A.....	40	915
Throckmorton County—		
Flowers et al Travis County Fee 1.	*	1933
Bruce Larkin et al Richards 2.....	*	1340

DRILLING REPORT

BAYLOR COUNTY—British American Oil Co.'s Haggard 1, sd 320 ft. J. S. Cosden et al's Garner 1, sd 1015 ft. Dallas Oil Co.'s Shawver 1, sd 1885 ft. W. H. Dyer et al's Cox 1, sd 2003 ft. Maer-Staniforth et al's Mills 3, dr 660 ft. Texhoma Oil & Ref. Co.'s Portwood 3, dr 1410 ft. Shaw-Rathke's Mills 2, sd 1423 ft; Mills 3, sd 1429 ft; Mills 5, dr 1100 ft.

CLAY COUNTY—Mills Bennett et al's E. L. Holloway 1, sd 1729 ft. Gulf Prod. Co.'s C. M. Worsham 6, dr 1525 ft. Lone Star Gas Co.'s Martin-Waggoner 25, dr 1310 ft; Holloway 14, re-set casing 1805 ft. John O'Neil et al J. F. Alcorn 1, dr 3050 ft.

COOKE COUNTY—Big Indian Oil & Dev. Co.'s P. Lester 1, cemented 8¼-inch casing 3445 ft. Elliott & Wallace's E. M. Osborne 1, spudded and sd. C. C. Lanier et al's A. Hyman 1, dk. Leonard & Jones' Hamilton 1, sd 1885 ft. Pettit et al's Nelson 1, sd 2620 ft; M. F. Williams 1, dk. Sun Oil Co.'s A. M. Ludeman 1, (near Marysville) rig. Terrell Drilling Co.'s I. F. Pierce 1, (B. Lusk sur) spudding. W. J. Rawson-Lyles et al's Cecil Aldredge 1-A, dr 2910 ft. Red River Drilling Co.'s Jones 1-A, sd 2180 ft. H. S. Simpson et al's G. D. Houston 1, sd 345 ft.

DENTON COUNTY — McNeil & Blackstock's T. Wright 1, dr 1630 ft. Gainesville Synd.'s K. Fontenberry 1, sd 1380 ft.

FOARD COUNTY — Murchison-Fain Oil Co.'s W. S. Bell 1, dr 940 ft. G. E. Fagg et al's Burress 1, rig. The Texas Co.'s McCoy 1, fsh 1480 ft.

GRAYSON COUNTY— The Texas Co.'s G. W. Cannon 1, dr 2750 ft. H. H. Johnson et al's Marshall 1, sd 1100 ft. Whitesboro Oil & Dev. Co.'s Jewell-Anderson 1, sd 1350 ft. Zee-Tex Oil Co's Griffin 1, sd 2340 ft.

HARDEMAN COUNTY—Benedum- Trees (was Sigler Oil Co.) Wheat 1, co 2770 ft.

HASKELL COUNTY—H. H. Adams et al's T. Procter 1, (A. Rodriguez sur.) making three million dry gas 1662-65 ft, testing oil sand 1700 ft. Herbert Oil Co's Macon 1, dr 810 ft. Meyers et al's Stoker 1, sd 1355 ft.

JACK COUNTY—Humphreys Corp.'s W. C. Campbell 1, (near Avis) dr 215 ft. Robinson et al's Marshall 1, sd 710 ft. Washington Oil Co.'s Gray 1, machine. Phillips et al's Wilson 1, sd 200 ft.

MONTAGUE COUNTY — Humphreys Corp.'s W. W. Jones 2, fighting gas craters, td 833 ft. Nocona Gas Co.'s R. Hynd's 2, cemented 6¾ casing on oil pay 902 ft. W. A. Morris et al's J. W. Maddox 1, lcn. Newblock Oil Co.'s Maddox 2, rig. E. L. Smith Oil Co.'s Maddox 1, steel dk. Texhoma & Republic's Rowland 1, rig. Texhoma Oil & Ref. Co.'s J. E. Lemons 1-A, dr 1390 ft; J. W. Rowland 1-A, making gas, 756-75 ft; Howard 5, sd 1837 ft. The Texas Co.'s W. W. Jones 1, dk; M. H. Salmon 1-B, lcn. Universal Oil Co.'s S. P. Steadman 1, dk.

THROCKMORTON COUNTY—Black Cat Oil Co.'s Gaither 1, dr 800 ft. Domestic Oil Co.'s Goeber 1, dr 1435 ft; Howsley 1, dr 1365 ft. Gray et al's Polk County Fee 1, dr 1115 ft. Hoffer Oil Corp. et al's Parrott 1, dr 200 ft; Reynolds Cattle Co. 1, dr 1400 ft. Humble O. & R. Co.'s A. S. Harrison 1, dr 1410 ft; Harrison 2-B, dr 620 ft; Stubblefield 2, fsh 945 ft. E. M. Jones et al's Rhodes 1, dr 1095 ft. Johnson & N-W Oil Co.'s Batchelor 2, ur casing 850 ft. Brice Larkin et al's Richards 1, dd, dr 1880 ft. Magnolia Pet. Co.'s L. B. Davis 1, dr 865 ft. Red Bank Oil Co.'s Graham 1, fsh bit 2335 ft. Reiter-Foster Oil Corp.'s Stubblefield 2, sd repairs 1450 ft. Richardson Bros. et al's Thomas 1, sd 1355 ft. Stiles & Schimmel's Stacey 1, ur casing 1440 ft. Schimmel Oil Co.'s W. R. Kelly 1, flowing and swabbing 100 bbls oil and some water 2985-3007 ft. Schimmel et al's Putman 1, sd 955 ft. Staley-Wynne's Cole 1, sd 1625 ft. E .L. Smith Oil Co.'s Burkhalter 1-A, dr 1380 ft. Texhoma et al's Graham 1, sd 990 ft; Reynolds 3, dr 1145 ft. Tucker et al's Reynolds Ranch 1, sd 715 ft.

Coastal Wildcats

COMPLETIONS

Company, Well Location—	Initial Production Bbls.	Depth
Fort Bend County—		
Pathfinder Oil Co.'s Pinckney 1	*	3800
Matagorda County—		
D. F. Bryan Prod. Co. & Hamm et al's Bryan 1	*	3830
Wharton County —		
Texas Co.'s Taylor 2	*	2100

DRILLING REPORT

ATASCOSA COUNTY — Rio Bravo Oil Co.'s Cortinas 3, on the Cortinas 80-acre tract near Anchorage, dr at 1526 ft in gumbo and shale.

CHAMBERS COUNTY—W. C. Moore et al's Blanke 1, on Blanke tract, NE quarter H&TC sec. 39, 1200 ft W of E line and 500 ft S of N line, dr at 510 ft.

FORT BEND COUNTY—Gulf Prod. Co.'s Moore 4, John M. Moore lease, dr at 1970 ft. Rich Development & Petroleum Co.'s Moore-Hager 2, at Big Creek, 300 ft NE No. 1, SE side of dome, waiting for rig. Rycade Oil Corp.'s Fritz Meier 2, 1550 ft E of SW cor and 200 ft N of S line of F. Meier 207.7-acre tract, casing set and cemented at 1330 ft, preparing to test; J. Meier 2, making lcn; Nash B-1, offset to Fritz Meier 2, dr at 1331 ft in shale. Texas Co.'s G. W. Armstrong 1, James Scott sur, 50 ft to N and W lines SW of Needville, dr at 2450 ft in sand; Robnison 13, at Blue Ridge, fishing at 3270 ft. Marland Oil Co of Texas' Moore 1, 7899 ft S and 46 degrees E and 5083 ft W and 44 degrees N of most western N cor of the Antonio Balle sur, dr at 1139 ft in sandy lime.

GALVESTON COUNTY—Gulf Prod. Co.'s George E. Smith 3, at High Island, 300 ft from No. 2, shut down waiting on water.

HARDIN COUNTY—Vacuum Oil Co.'s R. Teel 1, at Saratoga, 350 ft N and 200 ft W of most easterly SE cor, dr at 997 ft. Liberty Prod. Co.'s C. F. Seaberg 1, N of Dayton, 454 ft E and 466 ft S of NW cor of lot No. 11 T&NO sur No. 74, dr at 500 ft. The Texas Little Farms Co.'s Hawley 1, 5 miles from Sour Lake, dr at 1900 ft.

HARRIS COUNTY—Texas Co.'s Warren 3, 3 miles from Hockley, 750 ft NW No. 2, dr at 2600 ft; Warren 4, near Hockley, dr at 1237 ft. Rycade Oil Corp.'s Northsworthy 1, dr at 2003 ft in gumbo. Retrieve Oil Co.'s Sid Westheimer 1, 300 ft from N line and 300 ft from W line on Wiley Smith sur, coring hard gray sand rock at 2410 ft. Rio Bravo Oil Co.'s Settegast 1, at Pierce Junction, 700 ft W and 200 ft S of NE cor of Settegast 100-acre lease, dr at 1777 ft in gumbo.

JACKSON COUNTY—Vanderbilt Pet. Co.'s Seliner 1, 4 miles N of Vanderbilt, C. W. Hall subdivision of Harwood Burns ranch, dr at 3250 ft. Houston Oil Co.'s Rodgers 1, at Edna, building dk.

JEFFERSON COUNTY—Houston Oil Co.'s Fanny Crow 1, dr at 2535 ft in hard sand rock. Gulf Prod. Co.'s Thomas 2, at Fannette, near Hampshire, dr at 720 ft.

LIBERTY COUNTY—Liberty Oil Co.'s C. F. Seaberg 1, about 12 miles N of Liberty, dr at 600 ft.

MATAGORDA COUNTY — Rycade Oil Corp.'s Gray 3, at Markham, 1050 ft S of NE cor and 500 ft W of E line, blk 2, W. H. Gray land, dr at 3246 ft in shale and lime. Bryan Prod. Co. & Hamm et al's Bryan 2, making lcn near Bryan 1 Sheppard Mound Oil Co.'s Hawkins 2, near Hawkinsville, dr at 1900 ft.

WALKER COUNTY—C. N. Haskell's Phail 1, 9 miles NW of Huntsville, dr at 508 ft, cas set at 500 ft, small gas showing.

WHARTON COUNTY — Gulf Prod. Co.'s Felder 3, 20 ft to left and 1735 ft to N line, blk 2, S. Ingram sur, dr at 4760 ft.

LOUISIANA GULF COAST — Rycade Oil Corp.'s Calcasieu 1, in Calcasieu Parish, dr at 2543 ft in sand and shale; Hooks 1, at Lake Arthur, rigging up. Marland Oil Co. of Texas' Phoenix Development Co. 1, at Lockport, 650 ft E and 150 ft S of NW cor of NE quarter of sec 16, dr at 2531 ft. Vacuum Oil Co.'s Phoenix B-1, 1786 ft E, 400 ft S of NW cor sec 16, dr at 5370 ft; Phoenix C-1, 450 ft S and 825 ft E of NW cor of SW quarter of NW quarter, dr at 3440 ft; Fa quhar 2, 150 ft S and 100 ft E of NW cor of SW quarter of SW quarter of sec 9, dr at 3150 ft; Freiberg & Wolf 1, 780 ft S and 685 ft E of NE cor of SW quarter of sec 9, dr at 1760 ft; Miller 3, 694 ft W and 300 ft N of SE cor of NW quarter of sec 9, working over at 4080 ft; Miller 4, 870 ft E and 150 ft S of NW cor of SE quarter of sec 9, dr 91 ft; Lockmoore 3, 1225 ft E and 300 ft N of SW cor of the NW quarter of sec 10, spudding in.

East Central Texas Wildcats

COMPLETIONS

Company, Well and Location	Initial Production Bbls.	Depth
Falls County—		
Harrison-Bletch & Thompson B. & T. 1	*	3900
Limestone County—		
E. L. Smith Oil Co. Jones 1, Kosse Dist.	*	2341
Navarro County—		
Moore Bros. et al Quimby 1, Currie Dist.	*	3250
Atlantic Oil prod. Co. M. Talley 1	13½-100	2991

DRILLING REPORT

ANDERSON COUNTY—Roeser Pet. Co. et al's Brooks-Auld 2, dr 4300 ft; J. K. & L. P. Daniel 1, Chas. Gilmore sur, dr 3550 ft. Elkhart Prod. Co.'s Mack Lynn 1, ½ mile S of Elkhart, trace oil 950 ft, dr gumbo 1100 ft.

FALLS COUNTY—Harrison & Seaport Oil Co.'s Bargainer 1, Jos. Matthews sur, rig. Mook-Texas Oil Co. et al's J. Woodruff 1, S. C. Robertson League No. 4, dk.

HENDERSON COUNTY—Fred Haynes et al's E. G. Bounds 3, Jeffreys sur, rig. Billings et al's (was Boston Fincastle Oil Co.) Dansby 1, dr 3035 ft. Evans et al's Martin 1, co 2910 ft.

LIMESTONE COUNTY—Eisenmayer et al's Rivers 1, B. C. Abbott sur, sd water 1190 ft. Hurdleston et al's Gill 1, sd 2855 ft. Magnolia Pet. Co.'s Rich Kennedy 1, dr 3175 ft. Pure Oil Co.'s Stockton 1, H. Capps sur, dr 750 ft. Lewis et al's Oliver 1, dk. Wells et al's Richardson 1, spd and sd water. Swearingen et al's Dean 1, H. L. Thompson sur, sd water 1950 ft. Yoder et al's Saunders 1, Austin chalk 2300-2616 ft, coring sand 3010 ft.

MILAM COUNTY — Magnolia Pet. Co.'s M. M. Kime 1, S. P. Carson sur, cemt 6⅝-inch cas 3805 ft. Simms Oil Co. & Reiter-Foster Oil Corp.'s B. F. Stidham 1, J. P. Jones League, spudding; A. J. McKinney 1, J. K. Tyler sur, lcn. J. K. Hughes & Dodwell's R. T. and J. W. Foster 1, Gafford sur, dr 300 ft. C. A. Braden et al's Woodall 1, Wicksan sur, dr 3510 ft. John E. Lee & Zay Gardner's Leonard Isaacs 1, T. J. Chambers sur, dr 2590 ft.

NAVARRO COUNTY — Barkley-Meadows' Hilburn 3, chalk 2117-2570 ft, set cas 2930 ft; Hilburn 4, dr 3110 ft. Graves et al's Stubbs 2, dr 2215 ft. Gulf Prod. Co.'s Hilburn 3, dr 895 ft. Oxford Oil Co.'s Phipps 1, lcn; Phipps 2, tested dry 3035 ft. Chapman-Strotman et al's Ebb Bounds 1, bailing water with oil in hole, 3150 ft. Simms Oil Oil Co. & Sun Oil Co.'s Elliott 1, Richland-Navarro Dist, top Austin chalk 2403 ft, dr chalk 2620 ft. Sun Oil Co.'s H. A. Swink 1, dd, testing show oil 3183 ft; Hilburn 3, dk; Mary Hilburn 3, chalk 2134-2575 ft, set cas 2923 ft; Mary Hilburn 4, dr 1000 ft. Elliott & Nicolle's W. J. Westbrook 1, sd water 3711 ft. Gilbert Johnson et al's Greer 1, dr 2880 ft.

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Central West Texas Wildcats

COMPLETIONS

Company, Well, Location—	Initial Production Bbls.	Depth
Brown County—		
Gillman et al Newton 14	200	1290
Ward Oil Co. Windham 1	*	2610
Callahan County—		
Mook-Wakefield & Canyon O. & G. Co. McDonough 1	120	1434
Reagan County—		
Big Lake Oil Co. University 38	2025	2891
Texon Oil & Land Co. University 14	4575	2917
University 16	2065	2940

DRILLING REPORT

BROWN COUNTY — Adams-Moody et al's Newton 1, spudding. Anderson-McCamey's Williams 1, rig. Cal-Bro Oil Synd.'s Prater 2, lcn. Canyon O. & G. Co.'s Ellsberry 4, rig. Cranfill-Reynolds' Stone-Willis 1, rig. Gillman et al's Newton 11, rig; Newton 15, rig; Newton 16, spudding. Gillman-McMurray's Teston 5, dr 1160 ft; Teston 6, dr 150 ft; Chambers 2, lcn. J. K. Hughes et al's Arledge 1, dr 920 ft. Halmack Oil Co.'s Hubbard 1, lcn. Howell & Houseman's Helms 1, lcn. Ingleright et al's Eubanks 1, dr 430 ft. McCamey et al's Clark 1, lcn. Mendenhall et al's Newton 8, dr 630 ft; Newton 9, rig. Moore et al's Kilgore 1, fsh 1015 ft; Chambers 2, dr 890 ft; Baxter 2, testing pay 1283 ft; Baxter 3, rig burned 425 ft. Moore-Wilson's Gafford 5, dr 640 ft. Olympia O. & R. Co.'s Gilliam 3, rig. Prairie O. & G. Co.'s Armstrong 1, dr 2355 ft. Simms Oil Co.'s Gaines 1, sd 1485 ft. Stone et al's Byrd 1, making 1 million ft gas and 45 bbls oil 1328-32 ft. Rhodes & Higher's Prater 9, 1130 ft.

CALLAHAN COUNTY — Bowden-Dehurst et al's Costs 1, dr 115 ft. Canyon Oil & Gas Co.'s Barr 2, lcn. Nichols et al's Davis 1, sd 2460 ft. Quaker O. & G. Co.'s Gilliland 1, rig. Urban et al's Finley 1, co with 1650 ft oil in hole 2077-95 ft.

COLEMAN COUNTY — Canyon O. & G. Co.'s Morris 1, dr 2885 ft; Harris 1, dr 830 ft. Duncan et al's Gray 1, ur cas 2000 ft.

PALO PINTO COUNTY — Burton-McKee Oil Corp.'s Strawn Coal Fee 4, plugging back from 3800 to 3230 ft. Crawford-Singleton's L. Smith 1, dr 3165 ft. Jack Dalton Oil Co.'s Dalton 6, fsh tools 4010 ft. Hughes et al's Dalton 1, fsh 930 ft. E. T. Hart et al's Cardwell 2, fsh 2585 ft. Moore-Sneboldt's Slemmons 1, dr 650 ft; Sutart 3, lcn. Nelson Oil Synd.'s Owens 1, dr 1245 ft. Pender Prod. Co.'s Slemmons 2, dd, dr 3605 ft; Slemmons 3, dr 875 ft; Rasmussen 2, rig. Westheimer & Daube's Fee 1 and 2, lcns.

BREWSTER COUNTY — Green Valley Oil Corp.'s J. P. Wilson 1, sec 8, blk 212, sd for shot 2200 ft.

COKE COUNTY—West Virginia Oil Marketing Assn.'s J. R. Mims 1, dr 3325 ft.

CRANE COUNTY — Penn-Tex Dev. Co.'s Jax Cowden 1, making non-inflammable gas

1025 ft, dr 1305 ft. Texas-Development Co.'s Jax Cowden 2, sec 14, blk "X", Clark machine.

CROCKETT COUNTY — Humble & Marland's L. P. Powell 1, flowing 22 bbls oil, sd 2647 ft; L. P. Powell 2, lcn is 1000 ft due west of No. 1 Powell. Humble's Harris 1, lcn in NE corner sec 12, Washington Co. RR. sur, blk 3. Cumberland Oil & Gas Couch 1, rig. J. C. Cook (Wilcox) et al's University 1, sec 14, blk 29, dr 370 ft. Crockett Drilling Synd.'s J. M. Shannon 2, dr 110 ft; Robt. Massey 1, dr 2500 ft. Jacobs & Williams' (was Red Ball) University 1, sec 5, blk 29, sd 100 ft. Marland Oil Co. et al's W C. Corbett 1, lcn in sec 19, blk B-2, G. C. & S. F. RR. sur; University 1, lcn in sec 26, blk 31; University 1, lcn in sec 5, blk 30; J. S. Todd 1, lcn in sec 17, blk "W-X", G. C. & S. F. RR sur. Ely et al's W. T. Noelke 1, lcn in sec 39, HE&WT RR sur, blk "GG". Wm. Shaffer et al's University 1, sec 9, blk 47, rig. Cranfill Bros. et al's Harris 1, lcn in sec 6, W. C. RR. sur, blk 3.

CULBERSON COUNTY — The California Co.'s Watkins et al 1, fsh 15½-inch bit 934 ft. Grisham et al's Grisham 1, dr 1115 ft. Pure Oil Co.'s Mrs. G. H. Guard 1, lcn in sec 12, TP Ry sur, blk 63.

JEFF DAVIS COUNTY—Bill Little-Claude Byler's Denton 1, 15 miles W of Valentine, lcn.

GARZA COUNTY — Gulf Prod. Co. J. B. Slaughter 1, sec 18, J. Hays sur, dr 1995 ft. Marland Oil Co. et al's Connell 1, lcn in sec 55, GH&H RR sur, blk 5.

GLASSCOCK COUNTY — Gulf Prod. Co.'s L. S. McDowell 2-C, sec 30, blk 34, dr 350 ft. Marland Oil Co. et al's J. Currie Estate 1, lcn in sec 29, TP Ry sur, blk 32, T-4-S; G. Mook 1, lcn in sec 27, TP Ry sur, blk 33, T-3-S.

HOWARD COUNTY—Deep Rock Oil Co.'s W. T. Scott-Hyman 1, materials in sec 88, blk 29, W. & N. W. Ry sur. Marland Oil Co. et al's M. H. O'Daniel 1, lcn in sec 34, blk 30, TP Ry sur, T-1-S.

IRION COUNTY—Chas. Denny et al's D. E. Hughes 1, sd 1470 ft. W. A. Stout et al's J. D. Sugg 1, dr 1885 ft. Virginia-Texas Pet. Co.'s Case 1, lcn in sec 1227, GC&SF Ry sur.

KENT COUNTY—C. F. Greenwood & Marland Oil Co.'s J. E. Kuteman 1, sec 11, blk 4, fsh bit 3230 ft.

LOVING COUNTY—Rio Grande Oil Co.'s Sid Kyle 1, lcn in sec 12, blk 57, TP Ry sur. P-V Pet. Co.'s Russell 1, fsh 3920 ft.

MARTIN COUNTY—Humble O. & R. Co.'s C. C. Slaughter 1, sec 8, blk 35, dr 3045 ft.

MIDLAND COUNTY — Rook-Zimmerman's M. E. Hill 1, sec 8, TP Ry sur, blk 37, set 10-inch cas 930 ft.

MITCHELL COUNTY—The California Co.'s Abrams 9, cemt cas 2705 ft; Butlet 2, dr 2735 ft; Missouri State Life Fee 1, dr 2170 ft; Morrison 14, rig; H. C. Miller 1, dr 2465 ft; Womack 1, dr 2060 ft. R. G. Barnum & G. A. Henshaw's Scott 1, lcn in sec 32, SP Ry sur, blk 17. Eastland Oil Co.'s Keynard 4, dr 250 ft. M. Snyder et al's A. R. Keith 1, sec 10, blk 28, dr 1070 ft. S. A. Sloan et al's Scott 1, sd 3149 ft. Magnolia Pet. Co.'s Womack 1, dr 1380 ft; Badgett 1, dr 2870 ft; Mary Foster 1, dr 2310 ft.

PECOS COUNTY—Adams Oil Co.'s Devlin 1, 17 miles NW Fort Stockton, fsh 1005 ft. Gulf Prod. Co.'s White-Baker 1, sec 85, blk 194, run 5 3/16-inch cas 3659 ft. Dixie Oil Co.'s Sherbino 1, sec 51, GC&SF Ry sur, blk C-4, spd and sd.

REAGAN COUNTY — Big Lake Oil Co.'s University 17, dd, cas trouble 2794 ft; University 20, running 8¼-inch cas 2500 ft; University 30, rig; University 31, dr 2285 ft; University 32, fsh 2520 ft; University 33, dr 2510 ft; University 34, set 8¼ cas 2485 ft; University 35, fsh 2735 ft; University 36, dr by tools 2535 ft; University 37, dr by tools 2440 ft; University 39, dr by tools 2545 ft; University 40, dr 2225 ft; University 41, dr by bit 1915 ft; University 42, dr 2715 ft; University 43 to 46, moving in tools. H. D. Camp et al's University 1, sec 34, blk 11, sd 200 ft. Gulf Prod. Co.'s University 2, sec 1, blk 1, dr 1100 ft. B. H. Cogdell et al's University 1, sec 23, blk 8, dr 2870 ft. W. H. Dunning et al's J. D. Sugg 1, sec 185, TP Ry sur, blk 2, dr 2430 ft. Ben Simon et al's University 1, blk 11, rig. Marland Oil Co. et al's M. J. Wilson 1, sec 1199, CSD&RGNG Ry sur, rig. L. V. Tannehill et al's University 1, sec 15, blk 11, rig. Texon Oil & Land Co.'s University 12, sd 2535 ft; University 15, dr 2830 ft; University 17, sd storage in oil pay 2900-17 ft; University 20, dr 2455 ft; University 21, dr 2645 ft; University 22 to 29, rigs; University 4, Group 1, sec 23, blk 9, dr 1940 ft. University Oil Co.'s University 1, sec 17, blk 10, sd 3055 ft.

SCURRY COUNTY — The California Co.'s C. E. Wood 1, cemt cas 1020 ft. Northwest Co.'s Newman 1, salt water trouble 1290 ft. Morrison-Thompson's M. E. Towle 1, rig. Camp Springs O. & R. Co.'s Guinn 1, fsh cas 3865 ft.

STONEWALL COUNTY — Elder Nance et al's Ward Estate 1, sd 2120 ft; J. M. Thomas 1, dr 720 ft.

STERLING COUNTY—Chicago-Texas O. & G. Co.'s W. L. Foster 1, sd 1975 ft; D. C. Durham 1, sd 2250 ft; Durham 2, sd 1410 ft. Co-Operative Lease & Dev. Co.'s Douthitt 1, sd 2280 ft. Geo. Northrup & Hall's Ellwood 1, dr 2915 ft. Kanawah-Angelo Oil Co.'s L. T. Clark 1, bailed dry in sand showing oil 3035-49 ft. Harty et al's Reynolds 1, spd and sd for water Wrightsman et al's W. L. Foster 1, rig; G. R. Hull 1, dr 1910 ft. White Eagle Oil & Ref. Co.'s H. M. Mills 1, sec 33, blk 22, H&TC Ry sur, spd and sd for water.

SUTTON COUNTY—J. W. Sorrelle et al's Clarkson et al 1, lcn in sec 17, blk A-9, Georgetown RR sur.

TOM GREEN COUNTY — Chas. Denny et al's C. A. Broome 1, dr 520 ft.

UPTON COUNTY — Geo. McCamey et al's Mrs. M. L. Baker 1, sec 8, Grooms sur, rig. Big Mesa Oil Co.'s University 1, sec 17, blk 3, dr 1110 ft. W. P. Morris et al's H. M. Halff 1, sd 655 ft. Suggs & Chancellor's University 1, sec 6, blk 4, spd and sd.

Texas Panhandle Wildcats

COMPLETIONS

Company, Well, Location—	Initial Production Bbls.	Depth
Carson County—		
American Ref. Co. Burnett 1-D	†	1860
Hutchinson County—		
Amarillo Oil Co. L. Bivins 2-B....	¶140	3137
Wheeler County—		
Texhoma Oil & Ref. Co. J. H. Jackson 1-A	*	2405
Hal Vaughan & Pendleton et al P. W. Krey 1	*	2304
Jim Whittington et al O. T. Nicholson 1	*	2540

DRILLING REPORT

CARSON COUNTY — American Ref. Co.'s Burnett 1-C, pull cas 2800 ft; Burnett 1, sec 129, was Danciger, std 3128 ft. Crosbie Oil Co.'s Burnett 3, rig. Culbertson Bros. et al's Burnett 1, dr 250 ft. Gulf Prod. Co.'s Burnett 9, making 15 million ft gas 2695 ft. Magnolia Pet. Co.'s Burnett 1-A, dr 2510 ft. Marland Oil Co.'s Burnett 2, dr 2875 ft; Burnett 3, dr 1850 ft; Burnett 4, rig. Olson et al's Burnett 1, making 10 million ft gas and spraying oil and water 3045-60 ft. Premier Oil Corp.'s Burnett 1, sd making gas 2860 ft. W. W. Silk et al's Burnett 4, making 25 million ft gas, dr 2640 ft; Burnett 5, lcn. The Texas Co.'s Burnett 6, dr 2440 ft; Mary C. Burnett 3, flowing 50 bbls 2875-85 and 2905-11 ft.

COLLINGSWORTH COUNTY—Continental Oil Co.'s Hughes Estate 1, set 12½ cas 926 ft.

COTTLE COUNTY—T. J. Woodley et al's A. C. Dulaney 1, sd 3005 ft; Dulaney 2, dr 215 ft.

DALLAM COUNTY—H. A. Martin et al's James 1, sd 1640 ft.

GAINES COUNTY—Frank Phelps & Mundy's M. C. Lindsey 1, dr 845 ft.

GRAY COUNTY—A. R. Anderson-Bock et al's Beaver-Bradford 1, sd 2830 ft. Danciger Oil & Ref. Co.'s J. B. Bowers 1-A, fsh bit 2850 ft. W. H. Holmes' J. B. Morse 2, sd 3147 ft. Wilcox Oil & Gas Co.'s Coombs-Worley 1, est. 20 bbls 2832-58 ft and 2868-74 ft.

KING COUNTY—Hoffer Oil Corp. et al's Patten 1, sec 44, blk "A", Thompson sur, dr 250 ft.

HUTCHINSON COUNTY — American Ref. Co.'s Weatherly 1, dr 965 ft. W. T. Coble et al's Whittenburg 1, std 2200 ft. Dixon Creek Oil Co.'s Smith 2, dr by tools 2730 ft. J. H. Middleton et al's J. Weatherly 1, sd 2910 ft. New Domain Oil & Gas Co.'s Barton 1, standing 1750 ft oil in hole 2965-69 ft, td 3090 ft. Panhandle Ref. Co. et al's Dial-Perkins 2, std 950 ft; Dial-Perkins 3, rig; Whittenburg 1, lcn abn. J. R. Phillips et al's W. L. Kingsland 1, dr 1960 ft; Kingsland 2, rig. Tex-O-Oil Co.'s Johnson Bros. 1, sd 1175 ft. Roxana Pet. Corp.'s H. E. Smith 1, spudding. Twin Six Oil Co.'s Kingsland 1, dr 450 ft. Western Enterprise Oil & Gas Co.'s Smith 2, rig.

MOORE COUNTY—Amarillo Oil Co.'s Masterson 1-A, fsh cas 2360 ft.

POTTER COUNTY—Amarillo Oil Co.'s W. H. Bush 1, dr by cas 3495 ft; L. Bivins 4-A, fsh 15½ cas 690 ft.

WHEELER COUNTY—Angus et al's Ember 1, making 25 million gas 2120-25 ft. Best Oil & Gas Co.'s Tindall 1, dr 1315 ft. Globe Oil Co.'s Williams-Laycock 1, reset 6⅝-inch cas 2165 ft. Mid-Way Oil Co.'s Williams-Laycock 1, rig. Mid-West Exploration Co.'s W. C. Compary 1, rig; G. W. Porter 1, sr cas to set 6⅝-inch cas 2415 ft; Williams-Laycock 3, showing oil 2240-43 ft dr 2295 ft. Three-N Oil Co.'s Williams-Laycock 1, sprayed 50 bbls oil 2171-76 ft, making water dr 2505 ft. J. J. Rook et al's H. C. Phillips 1, set 8¼-inch cas 1300 ft. W. D. Sheddon et al's B. F. Westmoreland 1, ur 8¼ cas in salt and shale 2340 ft. Texhoma Oil & Ref. Co.'s J. H. Jackson 1, reset cas making oil and gas 2241-43 ft.

San Antonio District Wildcats

COMPLETIONS

Company, Well, Location—	Initial Production Bbls.	Depth
Jim Hogg County—		
Magnolia Pet. Co.'s Martinez 5.....	125	2076
Kitselman & St. Albans' No. 18....	350	....
Rydal Oil Co.'s Vela 1	125	....

DRILLING REPORT

BEXAR COUNTY — Humble Oil & Ref. Co.'s N. C. Cassin 1, dr 1060 ft; Menchaca 1, dk; Minna Coreth 1, 3 million cu ft gasser at 1135 ft; 2, dk.

BASTROP COUNTY — Quaker Oil Co.'s Howard Smith 1, dr. Jake Jarmon's Watkins 1, sd for water. Commodore Oil Co.'s Zandy Hart 1, sd for water.

DUVAL COUNTY — Co-Operative Drilling Co.'s Dinn 1, sd 2070 ft. Associated Oil Co.'s Sutherland 1, dr. Mesquite Oil Co.'s No. 1, setting liner. Booth Interests' W. R. Peters 1, lcn. O. W. Killam's Benavides 3, sd 2650 ft; 4, dr 1621 ft. Humble Oil Co.'s Pusch 1, r to set 6-inch cas at 1621 ft; Walsh 4, spudding in. United States Gas & Oil Co.'s Peters 3, dr. Kitselman & St. Albans' No. 18, producing 350 bbls. Wolcott-Morgan et al's No. 1, sur 688, dr. Russell-Hoffman's David Vela 1, dk; Givens 1, rigging up. Killam-Lang's Vela 2, spudded in. Mirando Oil Co.'s No. 11, set cas at 2048 ft. Rydal Oil Co.'s Vela 1, producing 125 bbls. San-Tex Oil Co.'s No. 1, sur 262, dr. Texo Oil Co.'s Lopez 4, dr 1978 ft. Weber Oil Co.'s Holbein 4, dr 3745 ft in gumbo. Plateau-Wheat's Nos. 4, dk; 4 and 5, lcns. O. W. Killam's Nos. 7, sd 2060 ft; 8, swabbing 300 bbls at 2062 ft; 9 and 10, dks; 5, 40 million cu. ft gasser. Plateau-Texas-Pacific's Nos. 2, dr; 6, set cas at 2002 ft. Elliott-Texas-Pacific's No. 2, dr.

GUADALUPE COUNTY — L. K. Hughes Dev. Co.'s Allen 20, no report. Magnolia Oil Co.'s Nos. 13 and 14, dr. Jennings et al's Vogel 1, no report. Weinert et al's Nolte farm 1, lcn. Stebbins Oil & Gasoline Co.'s Lenz 1, dk. Srivener's Vetter 1, dr 1750 ft. Southern Extension Synd.'s Willman 1, rigging up. M. O. Rayor's Jessie C. Lipscomb 1, dr. McClannahan's Herman Lenz 1, sd. Roxana Pet. Co.'s Herman Schmidt 1, dk. Joe Dunning et al's Hugo Vetter 1, dr. J. M. Davis et al's Koch 1, sd for water; 1 Augusta Hoese, dr. York Creek Oil Co.'s Fulshear 1, dr. Atlantic Oil Co.'s Nolte 1, reported abn 2026 ft.

JIM HOGG COUNTY — Buchanan-Plateau

Oil Co.'s No. 4, set casing. Rydal-Rycade Oil Co.'s W. P. Allen 1, sur 21, dr 2990 ft. Simms Oil Co.'s Wood 1, sur 84, dr. J. W. Pippen et al's Palacious 2, fsh 1305 ft. Plateau Oil Co.'s Martinez 5, sd 2066 ft. Magnolia Pet. Co.'s Martinez 5, producing 125 bbls at 2076 ft. Daniels & English's No. 1, blk 8, sur 1617, dr. Texas Co.'s Jennings 1, set cas at 902 ft. Big Bend Oil Co.'s Martinez 5, cemented 6⅝-inch cas at 2030 ft; 6, dr below 1050 ft. Alexander et al's Vela 1, dk. Buchanan et al's No. 4, dr below 1800 ft. Chenault et al's No. 4, set cas at 1051 ft. Grayburg Oil Co.'s Weil 1, dr 1500 ft in shale.

ZAPATA COUNTY — H. J. McMullen's Serapio Vela 1, 2 and 3, lcns. Texas Co.'s Cuellar 1, lcn; Jennings 1, dr 2072 ft in hard sandy shale. Chandlier-Gier's No. 1, sur 2, dr 2090 ft in sticky shale. R. K. Bateman et al's No. 1, sur 617, dr.

Louisiana Wildcats

COMPLETIONS

Company, Well, Location—	Initial Production Bbls.	Depth
Claiborne Parish—		
Collins & Woodley's McDonald 1, 26-21-5	*	2780
De Soto Parish—		
Tarver et al's Meadows 1, 2-14-10	*	1256
Union Parish—		
Simms Oil Co.'s Hammock 1, 22-22-3w	*	2108

DRILLING REPORT

BIENVILLE PARISH — Evans & Brown's Miles 1, 20-18-7, dr 2770 ft. J. E. Smitherman's Hunt-Hodges 1, 8-15-5, dr 310 ft.

BOSSIER PARISH—Best Oil Co.'s Finouef 1, 8-18-12, sd 170 ft. Clark et al's Wutzke 1, 2-18-12, rig. Woodley & Collins' Chamber 1, 20-23-12, rig.

CADDO PARISH—Dixie Oil Co.'s Dillion 53, 13-21-15, fsh 3689 ft; Jolly 1, 27-22-15, dr 3400 ft. Flournoy et al's Simpson 1, 8-16-15, sd 2555 ft. Fortuna Oil Co.'s C. L. B. 2, 8-20-15, set 6-inch 2935 ft; Mitchell 1, 17-18-16, dr 3485 ft. Haynes Bros. Louisiana L. S. & P. 1, 8-19-16, dr 3080 ft. Henderson et al's Caldwell 1, 29-22-15, dr 520 ft. Ohio Oil Co.'s E. K. Smith 17, 12-21-15, swabbed oil 3317 ft, to deepen. The Texas Co.'s Jeems Bayou 1, 15-20-16, dr 3625 ft; Levee Board 58, 27-21-16, dr 2475 ft.

CLAIBORNE PARISH — Triangle Drilling Co.'s Brown 1, 1-19-6, dr 2285 ft.

DE SOTO PARISH—Fortuna Oil Co.'s Alexander 1, 32-12-15, dr 3195 ft. Gulf Ref. Co.'s Williams C-18, 31-13-11, dr 3220 ft. Ulrey et al's Scott 1, 21-11-12, set 6-inch 2775 ft.

GRANT PARISH — Dowling & McCurry's Holmes 1, 20-19-1e, dk.

JACKSON PARISH — Big Chief Oil Co.'s Rymes 1, 13-14-4w, dr 2515 ft.

LA SALLE PARISH—Davis et al's Russell 1, 24-10-1e, rig. Finn & Ball's King 1, 23-10-1e, dk. Freeman & Hawkins' Urania 1, 14-10-1e, rig. Gould & Monroe Drilling Co.'s Harper 1, 23-10-1e, r/u air jammer, 1496 ft. Helm & Burch's Urania 1, 28-11-2e, dr 1392 ft. Imperial O. & G. Co.'s Urania 1, 10-10-2e, set 8-inch 1431 ft, td 1569 ft. Love et al's Tremont Lumber 1, 30-10-2e, to plug back to 1520 ft. Bill Rowe's Hardtner 1, 19-10-2e, wosr 1572 ft. Wright et al's Love 1, 16-11-2e, dr 1210 ft. Zeigen et al's Hardtner 1, 19-10-2e, dr 50 ft.

LINCOLN PARISH—Buckner et al's Barrett 1, 13-20-3w, sd 2090 ft. Ruston Drilling Co.'s Richardson 1, 7-18-2w, dr 2585 ft.

MOREHOUSE PARISH— Boisseau et al's Sullivan 1, 11-21-7e, rig.

OUACHITA PARISH — Dickson & Frue's Goodwin 1, 24-18-2e, dr 2875 ft. Palmer Corp.'s (White) Jones 1, 6-16-5e, coring 2459 ft.

SABINE PARISH—Emlet et al's Bowman-Hicks 6, 8-7-1w, dr 540 ft. Toro Pet. Co.'s Wyatt 1, 18-4-11, set 8-inch 1500 ft.

UNION PARISH—Jones & Walker Oil Co.'s Feazel 1, 6-19-2e, to resume dr, 2558 ft.

WEBSTER PARISH — Fortuna Oil Co.'s Bible 1, 8-20-9, fsh 2180 ft. Palmer Corp.'s Davis 1, Cotton Valley deep test, 23-21-10, dr 3460 ft.

WINN PARISH—Ohio Oil Co.'s Rowland 1, 5-12-1w, dr 1620 ft.

Oklahoma Wildcats

ALFALFA COUNTY—McGinnis & Ward's Watts 1, C SE NE SW 21-27-10w, sd 3506 ft.

ATOKA COUNTY—Hanson et al's Dabney 1, C SE NW 17-4-11w, sd 3490 ft. Wapanucka Dev. Co.'s Underwood 1, C W L SE SE 28-15-10w, sd 1343 ft.

BLAINE COUNTY—Okomo Oil Co.'s Edleman 1, SEc 21-15-10w, sd 2610 ft.

BRYAN COUNTY—Alexander's Hampton 1, SEc NE 26-7-11, sd 1400 ft.

CANADIAN COUNTY — Thos. Revelle's Dawson 1, C SE SE NW 20-26-9w, sd 3065 ft. Carrol et al's Setter 1, SEc 2-13-8w, sd 100 ft. C. D. Jones et al's Sanders 1, C NE NE NE 29-11-7w, sd 2150 ft.

CLEVELAND COUNTY — Garr Oil Co.'s Holland 1, NEc SE 31-10-4, sd 2620 ft.

GRANT COUNTY—Embry et al's Edwards 1, C SE SE NW 20-26-4w, sd 1000 ft. Midwest & Gulf's Moon 1, NEc NW 8-27-8w, sd 2490 ft. Frank Travers et al's Fuss 1, SWc NW NW 3-27-4w, sd 1250 ft. Wilson & Floyd's Bohan 1, C SW SW SE 26-27-4w, rig.

HUGHES COUNTY — Mathers & Skelly's McClain 1, C SW SW 4-5-11, sd 3026 ft. Walton, Snyder & Marshall's King 1, C E L NE NW 6-6-10, fsh 3675 ft. Atkins et al's Sewell 1, C SE SW SW 14-7-9, r 2000 ft. Parmenter et al's Stewart 1, C SW SE 11-5-8, rig. Henry Greis & Kerr's Pearson 1, C SE NE NE 30-5-10, rig.

JEFFERSON COUNTY—Barker et al's Major 1, C SE SW 34-5-6w, spd and sd. Godley Oil Co.'s Woodworth 1, C NE NW 36-5-4w, sd 1765 ft. Pauline O. & R. Co.'s Graver 1,

WE DON'T mind admitting, in strict confidence, that we sell more fishtail bits than any other manufacturer in the world. And it doesn't just happen that way, for there were fishtail bits before PELCO Bits were ever heard of.

Your money back if you try them and are not satisfied. Buy them at your supply store or direct from us.

Just between ourselves you can save a lot of money on one well by using PELCO Bits. They not only last longer—they make more feet of hole between redressings.

GOOD PEOPLE TO DO BUSINESS WITH

Pelican Well Tool & Supply Co.

General Offices: Shreveport, La.

C NE SW 17-5-8w, dr 2720 ft. Pure Oil Co.'s Howard 1, SWc NE 25-4-11w, dr 1420 ft.

KIOWA COUNTY—Connor et al's No. 2, NEc NW NW 34-7-16w, fsh 1200 ft. Alcorn Oil Co.'s No. 1, NEc SE SE SW 13-7-16w, sd 3850 ft.

LINCOLN COUNTY—P. & R. Corp.'s Hanzig 1, NWc SW 14-13-6, dr 2980 ft. Douglas Oil Co.'s Ewing 1, NEc 7-13-3, dr 3010 ft. Eugene Coste & Co.'s Ross-Fortune 1, SEc NW 26-12-2, dr 4195 ft. F. O. Howarth's Harris 1, SEc NE 22-15-2, dr 4465 ft. Santrock Drilling Co.'s No. 1, SEc NW 17-15-3, sd 920 ft. Ruby et al's Cull 1, NEc NW 36-15-4, r 3790 ft.

LOGAN COUNTY — Franklin Oil Assn.'s Moore 1, NWc SE SE 35-18-4w, sd 2520 ft. Haley & Pioneer's Quair 1, SWc SE 33-19-3w, sd 270 ft. Blackford O. & G. Lair 1, C S L N½ SE 28-16-1w, sd 1450 ft.

LOVE COUNTY — Drillers Syndicate Oil Co.'s Wilson 1, NWc SE 11-7-2, sd 2830 ft. Magnolia Pet. Co.'s Crowe 1, C NE NE SE 13-8-2, dr 2610 ft. Smyer & Stein's Gray 1, C SE SE 12-9-1, rig. Jackson & Askew's Haverkamp 1, C SW SW NW 27-7-2, dr 2835 ft.

MAJOR COUNTY—Texas Prod. Oil Co.'s Basin 1, SWc 6-22-14w, sd 200 ft. Franz & Slick's Gray 1, C NW 36-21-11w, sd 1000 ft.

PONTOTOC COUNTY—Highland Oil Co.'s Hatcher 1, C NW SW 4-4-5, sd 2285 ft. Dixie Oil Co.'s Moran 1, SW SW NE 33-3-4, set cas 1063 ft.

POTTAWATOMIE COUNTY — Ossie Oil Co.'s Howell 1, SWc NE 17-10-2, sd 3363 ft. The Texas Co.'s Allenbaugh 1, SEc SW 3-11-6, dr 1610 ft. Dave Detrick's McGathey 1, SEc 10-6-2, sd 3850 ft. H. G. Gwinnup's Floyd 1, SW SE 12-11-3, sd 3655 ft. Pierce Oil Co.'s Madgett 1, NWc 25-10-4, sd 460 ft. McMann Oil Co.'s Heghan 1, SWc NW 19-7-4, fsh 100 ft. Halmond Osmond et al's Fiddler 1, SEc NW 4-5-5, sd 545 ft. Central National Oil Co.'s Toney 1, C SW SW SW 28-10-4, cementing 755 ft.

ROGER MILLS COUNTY—Twin Hills Oil Co.'s McClure 1, NWc 15-16-26w, no report. Trio Oil Co.'s No. 1, SEc NW SW 3-13-26w, no report.

SEMINOLE COUNTY — Maxwell & Harvey's Christie 1, C NE NW 33-6-6, sd 3000 ft. Link Oil Co.'s Carolina 1, C SE NW 14-6-7, sd 2840 ft. R. F. Garland's Farlin 1, C NE NW 6-6-8, sd 1390 ft. Central National Oil Co.'s Harjo 1, C NE SE NE 14-11-7, sd 3750 ft. Transcontinental Oil Co.'s Davis 1, NE SE 22-7-7, co 3310 ft. Bryan Bros.' Walker 1, C SE SE SE 4-7-6, dr 1845 ft. Riverside & Kinney's Nitley 1, C S½ NE SE 24-5-5, rig.

WOODS COUNTY—Victor Oil Co.'s Van Buskirk 1, SWc SE 10-25-15w, sd 960 ft.

WASHITA COUNTY—Meridian Pet. Co.'s No. 1, SE SE SE 14-9-15w, lcn.

Arkansas Wildcats

COMPLETIONS

Company, Well, Location—	Initial Production Bbls.	Depth
La Fayette County—		
Humble Oil & Ref. Co.'s Bradshaw 1, 26-16-25	*	1406
Miller County—		
Humble Oil & Ref. Co.'s Mann 1, 36-16-26	*	1320

DRILLING REPORT

ASHLEY COUNTY—Brown et al's Fee 1, 33-16-7, dk. Pine Ferry Oil Co.'s Pine Ferry 1, 1-17-6, dk. Rhodes et al's Bledsoe 1, 20-15-7, rig.

BRADLEY COUNTY—Ruth Easley's Brown 1, 21-16-12, rig. The Texas Co.'s Saline Lumber 1, 11-17-10, dr 2550 ft.

CALHOUN COUNTY — Brown-Hunt-Murdock Synd.'s Freeman-Smith 1, 24-15-15, dk timbers. Klotz & Thomas' Forrest City Box 1, 14-16-14, set 6-inch 2567 ft. Murdock et al's Eagles Mills 1, 29-12-15, dr 2070 ft.

CLEVELAND COUNTY — Dedman et al's Moore 1, 28-9-10, dk.

COLUMBIA COUNTY—Arkansas Fuel Oil Co.'s Longino-Goode 1, 14-18-20, sdtr 2806 ft. Greeson et al's Pearce 1, 3-18-20, dr 1415 ft. Gulf Ref. Co.'s Hines 1, 17-17-18, setting 6-inch 2555 ft. Hude & Aarnes' Brown 2, Stephens deep test, 13-15-20, r/u to deepen, 2109 ft. Phillips et al's Davis 1, 14-18-21, sw 2755 ft. Pluto Oil Co.'s Dickens 1, 20-18-2, dk; Robinson 2, 23-18-23, dr 710 ft.

DREW COUNTY—Graves et al's Karnes 1, 10-13-6, dr 2700 ft. McClintock et al's Ogle 1, 35-13-5, set 10-inch 200 ft. Spooner et al's Meyer 1, 4-16-17, sd 50 ft.

HEMPSTEAD COUNTY—Grassy Lake Oil Assn.'s Gun Club 1, 27-12-27, sd 2100 ft. Tarver et al's Swafford 1, 14-11-25, dr 1245 ft. Zingg et al's Sutton 1, 9-11-23, sd 810 ft. Wooten et al's Clarke 1, 22-11-24, sd 2040 ft.

LA FAYETTE COUNTY — Arkansas Fuel Oil Co.'s Allen 1, 18-19-24, dk. Estes & Oliver's Bodcau 1, 13-18-24, dr 2205 ft. Humble O. & R. Co.'s Ford 1, 28-16-24, dk; Bodcau Lumber 1, 16-15-22, to dr 6-inch plug 1216 ft; Shirtliff 1, 3-16-23, coring 1320 ft. Ken-Saw Pet. Co.'s Red River Valley 2, 3-20-24, sd 2620 ft.

LITTLE RIVER COUNTY—Grote et al's Allen 1, 2-13-29, to plug back to 2968 ft. Johnson et al's Hawkins 1, 10-11-31, sd 1350 ft.

MILLER COUNTY—Copeland et al's Wiseman 1, 36-15-27, coring 1280 ft. Davidson et al's Faulk 1, 29-17-27, sd 900 ft. Gillespie et al's Fee 1, 2-15-26, dr 1185 ft. Humble O. & R. Co.'s Mann 3, 35-16-26, rig; Fouke 1, 36-16-27, dr 1400 ft.

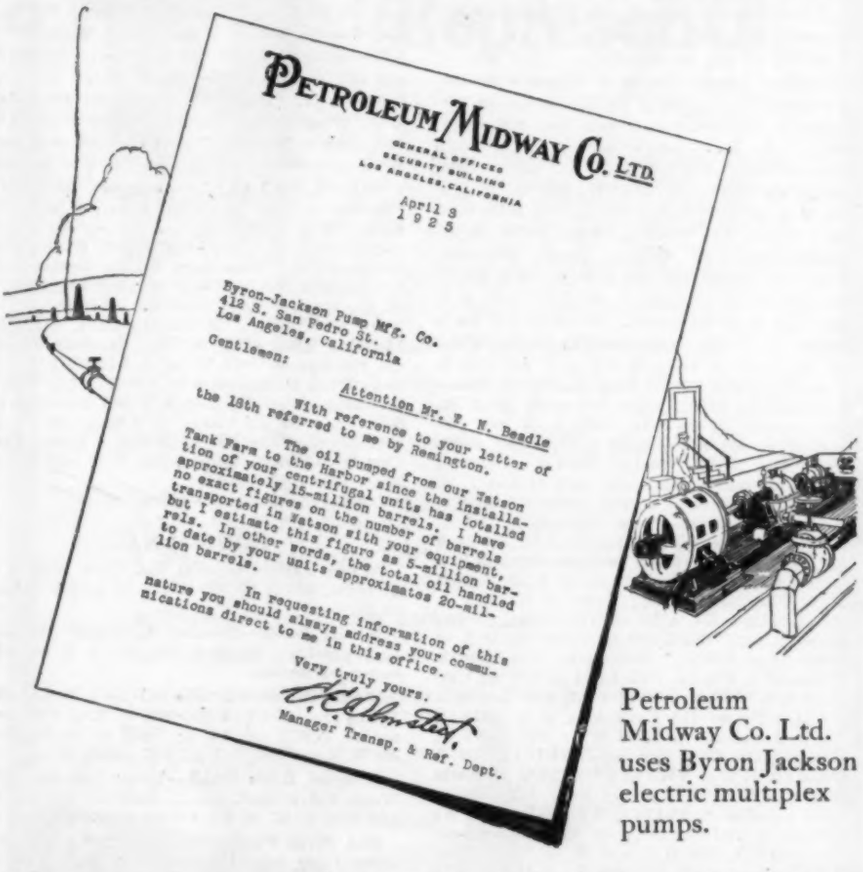
NEVADA COUNTY — Dudney-Thompson Synd.'s May 1, 23-14-22, sd 1088 ft. Falcon Drlg Co.'s Weaver 1, 6-13-21, sd 800 ft. Greeson et al's Ellis 1, 2-15-21, reset 10-inch 150 ft. Humble O. & R. Co.'s Smith 1, 7-14-19, dk. Magnolia Pet. Co.'s Johnson 1, 3-15-21, rig. Steele et al's Fincher 1, 9-15-22, sd 60 ft. White et al's Hamilton 1, 34-14-22, sd 2249 ft.

OUACHITA COUNTY — Bondurant et al's Garner 1, 8-18-12, rig. Buffalo Oil Co.'s Morgan 1, 22-15-19, wosr 2226 ft; Morgan 2, 22-15-19, fsh 2121 ft. Humble O. & R. Co.'s Smith 1, 7-14-19, lcn. Jones et al's Wilson 1, 26-15-18, coring 2333 ft.

PIKE COUNTY—Strawn et al's Banks 1, 11-8-25, coring 227 ft.

UNION COUNTY — Magnolia Pet. Co.'s Chandler 1, 4-19-14, dr 2955 ft. Minnesota Oil Co.'s Davis 1, 31-16-14, fsh 2800 ft. Ohio Oil Co.'s Arkansas Timber 1, 21-18-10, dr 1440 ft. Ward et al's Goodwin 1, 16-16-14, dr 2595 ft.

Pumping 20 million barrels without repairs


PETROLEUM MIDWAY CO. LTD.
GENERAL OFFICES
SECURITY BUILDING
LOS ANGELES, CALIFORNIA
April 3
1925
Byron-Jackson Pump Mfg. Co.
412 S. San Pedro St.
Los Angeles, California
Gentlemen:
Attention Mr. F. N. Beadle
With reference to your letter of the 18th referred to me by Remington.
The oil pumped from our Watson Tank Farm to the Harbor since the installation of your centrifugal units has totalled approximately 15-million barrels. I have no exact figures on the number of barrels transported in Watson with your equipment, but I estimate this figure as 5-million barrels. In other words, the total oil handled to date by your units approximates 20-million barrels.
In requesting information of this nature you should always address your communications direct to me in this office.
Very truly yours.
Manager Transp. & Ref. Dept.

Petroleum Midway Co. Ltd. uses Byron Jackson electric multiplex pumps.

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PERMITS GRANTED FOR NEW WELLS

Weekly Comparison of New Wells

Following is a condensed table giving a comparison of permits or locations made for new wells in Kansas, Oklahoma, Arkansas, Louisiana, Texas and California:

	Number of Wells for Week Ending															
	April 10	April 17	April 24	May 1	May 8	May 15	May 22	May 29	June 5	June 12	June 19	June 26	July 3	July 10	July 17	July 24
Kansas .	23	37	38	26	32	32	27	29	44	40	19	29	50	39	31	41
Oklahoma	107	96	82	81	86	94	95	114	106	93	104	115	80	96	66	69
Arkansas	55	34	64	60	49	31	77	62	67	40	64	41	*4	53	72	63
Louisiana	9	14	20	7	10	7	12	8	16	18	8	8	11	9	15	9
Texas . .	214	213	215	147	144	208	130	167	221	198	204	206	168	176	203	208
California	26	28	40	27	26	34	29	33	24	33	37	30	49	34	28	25
Total .	434	422	459	348	347	406	370	413	478	422	436	429	362	407	415	415

*Smackover permits not available for past week; will be included in next issue.

ARKANSAS

Bradley County—Ruth Easley's Brown 1, 21-16-12, 300 ft N and E of SWc SE¼ SW¼.

Calhoun County — Brown Hunt - Murdock Synd.'s Freeman-Smith 1, 24-15-15, 200 ft N and W of SEc NE¼ NE¼.

Cleveland County—Rob't H. Dedman's Moore 1, 28-9-10, 300 ft N and E of SWc NE¼ SE¼.

La Fayette County—Arkansas Fuel Oil Co.'s Allen 1, 18-19-24, SEc SE¼ SW¼.

Miller County—Humble O. & R. Co.'s Mann 3, 35-16-26, 150 ft S and E of NWc of section.

Nevada County—Humble O. & R. Co.'s Smith 1, 7-14-19, 990 ft N and 330 ft E of center. Magnolia Pet. Co.'s Johnson 1, 3-15-21, 330 ft N and W of SEc of section.

Ouachita County—Bailey & Murray's Rhoten B-4, 32-15-15, SEc SW¼ NW¼. Calord et al's Laney 7, 31-15-15, center east line S½ SE¼ SW¼. J. E. Crosby's Berry 12, 33-15-15, center of south line SW¼ NE¼. Cumberland Pet. Co.'s Elliott 2, 23-15-17, 200 ft N and 500 ft E of SWc NE¼ NW¼. Gilliland Oil Co.'s Myar B-6, 30-15-16, NEc NE¼ SE¼, Louann deep test. Grayson Trust's Wingfield 2, 5-16-15, center east line NW¼ NW¼ SE¼. Gulf Ref. Co.'s Goodwin 8, 32-15-15, 1060 ft S and 1120 ft W of center. Houston Oil Co.'s Hinton 9, 5-16-15, center west line SE¼ NW¼; *B. S. Laney 9, 31-15-15, 200 ft N and 760 ft W of SEc SW¼ SE¼. Howell et al's Williams 6, 3-16-15, in NE¼ NE¼. Humble O. & R. Co.'s Arnold 3, 26-15-16, 1120 ft N and 200 ft E of center; Farris 6, 34-15-15, center north line NW¼ NW¼. Marine Oil Co.'s Umstead 9, 5-16-15, center north line, east of Lot 1, in NE¼. Natural Gas & Pet. Corp.'s Laney 9, 31-15-15, center east line E½ NW¼ SE¼. Phillips Pet. Co.'s Joyce 14, 33-15-15, 300 ft S and 200 ft W of NEc of section. Roxana Pet. Corp.'s Berg A-4, 28-15-15, 200 ft N and 270 ft W of SEc NE¼ SE¼; Laney A-1, 31-15-15, 275 ft N and 225 ft W of NEc NE¼ SW¼; Reynolds 2, 27-15-15, 330 ft S and 200 ft E of NWc SE¼ SW¼. Shreveport Oil Corp.'s *Umstead 1, 4-16-15, NEc Lot 4 in NW¼; Umstead 4, 4-16-15, center of north line Lot 4 in NW¼. Simms Oil Co.'s Berg C-4, 32-15-15, 200 ft S and 330 ft E of NWc SW¼ NE¼. Standard Oil Co.'s Bennett 7, 33-15-15, 200 ft S and 650 ft E of NWc of SW¼ SE¼; Bennett B-5, 32-15-15, 200 ft N and E of SWc NW¼ NE¼; Griffin 9, 33-15-15, NWc NE¼ SW¼; Johnson 5, 29-15-15, SWc of section; Umstead B-7, 32-15-15, 200 ft S and E of NWc SE¼ NW¼. Sun Co.'s Johnson 7, 30-15-15, NEc SE¼ SE¼.

Union County—J. W. Clark's *Palmer 3, 9-16-15, center of east line SE¼ SW¼. Coates & Sowell's Bilyieu 3, 8-16-15, 150 ft S and 300 ft W of NEc SW¼ NE¼. George & Jone's Murphy 5, 18-16-15, NEc NE¼ NW¼. Gulf Ref. Co.'s *Alphin 8, 10-16-15, 200 ft N and 660 ft W of SEc NE¼; *Alpin 10-16-15, center of north line NE¼ NE¼. Higgins O. & F. Co.'s McGraw 3, 6-16-16, NWc SE¼ SE¼. Houston Oil Co.'s *Milner 5, 3-16-15, center of west line SE¼ SE¼. Humble O. & R. Co.'s Lawton A-4, 7-16-15, 2440 ft S and 200 ft E of NWc of section. Johnson Drlg. Co.'s Anderson 4, 1-16-17, SEc SW¼ SE¼. Keene & Woolf's *Henshaw 2, 17-16-15, 200 ft S and E of NWc NE¼ SE¼. Kinnebrew et al's *Williams 1, 3-16-15, 200 ft N and E of SWc NE¼ NE¼. Lion O. & R. Co.'s Bilyieu C-4, 8-16-15, 150 ft N and 616 ft W of SEc NW¼ SE¼; *Murphy B-2, 200 ft S and E of NWc NW¼ NE¼; Murphy C-7, 8-16-15, 260 ft S and 270 ft E of NWc NE¼ SW¼; Murphy C-8, 8-16-15, 175 ft S and 200 ft W of NEc NE¼ SW¼; Murphy G-3, 8-16-15, 215 ft S and 200 ft E of NWc NE¼ SE¼; Murphy G-4, 8-16-15, SWc NE¼ SE¼. McDonald et al's *Wingfield 1, 5-16-15. Natural Gas & Pet. Corp.'s Murphy C-3, 8-16-15, 200 ft S and W of NEc SW¼ SE¼. Page et al's Bennett 1, 11-16-18, NWc SE¼ NE¼. Page Oil Corp.'s *Murphy 1, 7-16-15, 200 ft N and E of SWc SE¼ SW¼. Phillips Pet. Co.'s *Thompson A-1, 7-16-15, 350 ft S and 250 ft W of NEc SW¼ NE¼. Richardson et al's Bradford 3, 8-16-15, SEc NW¼ NW¼. Roxana Pet. Corp.'s T. D. Murphy 4, 7-16-15, 200 ft S and E of NWc SE¼ SE¼. Simms Oil Co.'s *Cook 9, 16-16-15, NWc NE¼ NE¼. Southern Crude Oil Purchasing Co.'s *Lyall 5, 3-16-15, 150 ft S and W of NEc Lot 4 in NW¼. Stu. Co.'s *Hatfield 2, 6-16-15, 1120 ft N and 200 ft W of SEc SE¼ SE¼; *Hays 4, 3-16-15, 200 ft N and E of SWc NW¼ NW¼. Unity Pet. Corp.'s Bilyieu 8, 8-16-16, 550 ft N and 480 ft W of SEc SW¼ NE¼.

*Old wells to be deepened.

LOUISIANA

Acadia Parish—General Pet. Co.'s Wilson 1, 45-9s-2w, 424 ft W and 674 ft N of SE Corner of Section.

Bossier Parish—Woodley & Collins' Chamlee 1, 20-23n-12w, 330 ft S and 330 ft E of NW corner of section.

Caddo Parish—Fortuna Oil Co.'s Raines 20, 22-21n-15w, 140 ft E and 640 ft N of SW corner of NW¼ of NE¼; Spell 1, 29-21n-15w, 200 ft N and 200 ft E of SW corner of section.

Jefferson Davis Parish—Yount Lee Oil Co.'s Welsh Oil & Dev. Co. 2, 21-9s-5w, 1074 ft N and 68.6 ft W of SE corner of section.

Red River Parish—Fortuna Oil Co.'s Continental-Polly 34, 7-12n-10w, 20 ft N and 530 ft W of SE corner of NE¼ of NW¼; 35, 7-12n-10w, 565 ft N and 732 ft W of SE corner of NE¼ of NW¼.

St. Martin Parish—Rycade Oil Co.'s Chas. G. Hooks 1, 27-10s-9e, 250 ft W of NE corner of Blk. 11 and 50 ft S of south bank of Bayou Crook Chene.

Webster Parish — Fortuna Oil Co.'s R. R. Cox 3, 15-21n-10w, 330 ft N and 330 ft E of SW corner of NW¼ of SW¼.

ARKANSAS

Bardsdale Field—Montebello Oil Co.'s Sheills 118, 4-3-19.

Casmalia Field—Pan-American Pet. Co.'s Soladino 15, 9-34.

Coalinga Field—Paragon Oil Co.'s No. 17, 17-18-15. Zier Oil Co.'s N-3, 1-20-14. Pacific Oil Co.'s No. 66, 25-20-14.

Conejo Field—C. A. Harding Trustee's No. 46, 33-2-20.

Inglewood Field—Brown-Shasta Oil Co.'s 4, 7-2-14; 3, 7-2-14. Petroleum Securities Co.'s Rubel 15, 8-2-14; Rubel 6, 8-2-14.

Kern River Field—Loscal Pet. Co.'s No. 17, 21-28-28. Boston Pet. Co.'s No. 24, 20-28-28.

Long Beach Field—General Pet. Corp.'s K. & H. 6, 19-4-12. Harry Failing's Finney 1, 19-4-12.

Los Angeles County Field—Superior Oil Co.'s Vail 1, 15-2-12.

Midway Field—Honolulu Cons. Oil Co.'s No. 13, 4-32-24. Bell-Evans Oil Co.'s No. 13, 35-32-23. Union Oil Co.'s Mason 1, 36-30-22.

Rosecrans Field—Marine Corp.'s No. 41, 20-3-13. Julian Pet. Corp.'s Athens 12, 7-3-13.

Sunset Field—Standard Oil Co.'s Rass 2, 10-11-23.

Torrance Field—C. C. M. O.'s Torrance 88, 10-4-14; Shell Co.'s Frenger 5, 9-4-14.

Wheeler Ridge Field — Standard Oil Co.'s Kern County Lease 2-19, 27-11-20; Kern County Lease 20, 27-11-20.

OKLAHOMA

Kay County—Bird's No. 1 Hampton, C NW NW NE 9-28-1w. Marland Oil Co.'s North 1, C NE NW NE 12-26-2w; North 2, C NW NW NE 12-26-2w; Hubbard 2, C NE NE NW 12-26-2w. Mid-Continent Pet. Co.'s Schooland 1, C NE NE SW 33-25-2w.

Noble County—Mid-Co. Petroleum Co.'s Wilkins 1-A, C NE NE SE 30-24-1w.

Garfield County—Champlin Ref. Co.'s Allen 2-B, NWc SE SE 16-22-3w. Sinclair O. & G. Co.'s Shaffer 9, NWc NE NW SE 18-22-3w; Crews 11, SEc NE SW SW 19-22-3w.

Pawnee County—Magnolia Pet. Co.'s Gowling 4, SEc SW 9-20-6; Fugate 1, SEc NE SW 9-20-6. Sun Ray Oil Co.'s Canfield 6, NWc SE SE SE 17-20-7.

Payne County—Skelly Oil Co.'s Kaufman 1, NEc SE 6-17-4. Dale Shaffer's Myrick 1, NWc SE 7-14-4.

Lincoln County—Gypsy Oil Co.'s Spurgeon 1, NEc NW NE 7-15-8. Magnolia Pet. Co.'s Martin 1, NEc NW SW 8-14-5. Shaffer O. & R. Co.'s No. 1 Nichel, 10-14-5.

Osage County—Superior Oil Co.'s No. 1, C E L W½ NE SW 29-20-11. Barnsdall Oil Co.'s No. 14, SW SE 5-20-12. I. T. I. O. Co.'s

No. 5, C SE NW NW 1-21-8; No. 6, NE NW NE NW 1-21-8. Skelly Oil Co.'s No. 5, NW NE NE 2-21-8. Breene et al's No 11, C S L NW 5-21-11. Lewis Oil Co.'s No. 1, NE SE 11-21-11 (owd). C. W. Titus' No. 1, NW SE 11-21-11. Selby O. & G. Co.'s No. 11, SE NE SE NW 16-21-12. Peters Pet. Co.'s No. 2, SW NW SW NE 34-24-9. Barnsdall Oil Co.'s No. 5, SW NE SW SW 2-24-11. Seaman et al's No. 1, NE SW 17-26-6. Devonian Oil Co.'s No. 11, SE NW SE SW 34-25-11. Carter Oil Co.'s No. 7, SE NE 21-26-6; No. 16, SW NW 21-26-6. Lewis Oil Co.'s No. 12, SE NE 21-26-6. Murril et al's No. 4, SE NW SW NE 17-27-10. Lamber-Alcorn's No. 1, C W L SE 36-29-11.

Hughes County—T. B. Slick's Polk 2, C NW NE NE 10-9-9; Polk 3, C NE NE NE 10-9-9. Tidal Osage Oil Co.'s Lucey 4, C NE NW NW 9-9-11.

Garvin County—The Texas Co.'s Derdyn 8, NWc SW NE 17-1n-3w; Derdyn 9, SWc NE 17-1n-3w.

Grady County—Briscoe & Hall's Farwell 2, C SE NE 23-5n-8w.

Stephens County — Pauling-Clark's Garza 1, C W L SE NE 2-2n-6w, American Pipe Line Co.'s Ketchum 3, SWc NW SW NW 25-1n-9w. Magnolia Pet. Co.'s Harris 11, SEc SW SW NE 25-1n-9w; Woodword 1, NEc NW NE 14-2s-8w. Mid-Kansas O. & G. Co.'s Bristowe 5, SWc SE 18-2s-7w.

Carter County—Magnolia Pet. Co.'s Newstadt 1, C NW NW SE 34-1s-3w.

Okfuskee County — Independent Oil & Gas Co.'s Jacobs 1, SWc NW NE 22-12-11. Josey Oil Co.'s Sears 1, NEc SE NW 8-11-11. Windsor Oil Co.'s Grayson 3, SEc SW NW 22-11-11.

Okmulgee County—Jackson & Wise's Adams 5, SEc SW SW 3-15-11. Cosden O. & G. Co.'s Moore 5, NWc SW 14-15-12. A. G. Hazlett's Tucker 2, SWc SE SE 2-13-14. E. J. Lambert's Freeman 4, C N L NE NW 7-13-15. Ozark Drilling Co.'s Barnett 2, C SW SW NW 2-15-14. Papoose Oil Co.'s Osborn 24, C S L NW SE 21-15-14.

Creek County—Lima Oil & Gas Co.'s Charles 1, NEc SE NE 25-15-7. Phillips Pet. Co.'s Wattie 2, NEc SW NE 31-15-8. The Texas Co.'s Beavers 3, C SW SE NW 13-14-8. Riverland Oil Co.'s Johnson 1, NWc NE SW 28-18-11. McClung et al's Fife 1, NWc SE NE 4-17-11. W. C. Cole's McDougal 1, NEc 5-17-11. M. P. Evans' Nichols 1, SWc NW SE 30-17-11. Turner & Suppees' Burnett 1, SWc NW NW 9-16-12. H. C. Wilson's Thompson 2, NWc SW NW 6-15-11.

Tulsa County—Mutual Oil Co.'s Colbert 1, NEc SE SW 29-19-12. Thrift et al's Johnson 2-A, C S L NW SE 35-18-13. Alboo Oil Co.'s Hodge 1, SEc SW SE 5-17-14.

Jefferson County—Humble O. & R. Co.'s No. 2 Busby, C SW SE SW 18-7s-5w.

KANSAS

Butler County—Winters-Harwood's Hill 1, SWc SE SE 27-24-7. L. L. Davidson et al's Huttle 1, NEc SW SW 10-25-6. Joe Liggett's Jones 1, SWc 24-24-7. Sparta Oil Co.'s Palmer 1, NWc SE 32-26-6. Mason & Ralston's No. 1, NEc SE SW 32-26-6. Forsker Oil Co.'s Schrieber 1, SWc NE 32-26-6. Lewis Oil Co.'s Webber 1, SEc NW 32-26-6.

Chase County—Aleer et al's Leedy 1, SEc SW NW 19-19-8.

Kingman County—Ozark Drilling Co.'s Richardson 1, SEc NE SW 4-30-6.

Cowley County—T. B. Slick's Carson 4, SEc NE 20-32-3. Empire G. & F. Co.'s Brown 3, NWc SW NE 13-21-7. Carden et al's Eastman 1, C SW SE 6-31-6. T. B. Slick's Carson 1, NWc SW 20-32-3. Mississippi Valley Oil Co.'s Speers 1, NEc 31-33-6.

Elk County—York State Oil Co.'s Fleek 3, SEc NW 21-30-11. State Oil Co.'s Webb 1, NWc NE NE 23-31-10.

Greenwood County—Titus et al's Prather 7, SWc NE NE 30-22-10. Empire G. & F. Co.'s Kopfer 5, SEc NE SE 11-22-11; Wood 1, NWc SE 14-22-11; Greenwood 1, NWc SE 15-22-11; Harris 1, NEc NW 19-22-11. Tidal Oil Co.'s Morris 1, SWc NW SW 8-22-9. Sinclair O. & G. Co.'s Burke 2, NWc NE NW 36-23-8. Greenland Oil Co.'s Taylor 2, SEc SW 25-23-8. Sheedy et al's Green 5, NWc SW NW 11-23-9; Green 6, SWc NW 11-23-9. Skelly Oil Co.'s No. 8, NEc NW NE 15-23-9. Mission Oil Co.'s Morris 3, NEc SE SW 19-23-9. Phillips Pet. Co.'s Morris 2, SEc NE SW 19-23-9. White Eagle O. & R. Co.'s Morris 1, NWc SW SE 19-23-9. Roth & Mission's Scott 2, SEc NW SW 22-23-10. Griffith et al's Worley 1, C E L SE 29-24-11. Murphy et al's Wiggins 1, SWc NW SW 29-25-11. National Refg. Co.'s Hover 2, NEc SW SW 3-25-9. Mid-Kansas O. & G. Co.'s Hoffman 7, NEc SW NE SW 30-25-9. Abell et al's Hammond 1, NEc 5-25-10. Hogan et al's Norbrecht 1, C E L SE NE 8-27-10. Neely O. & G. Co.'s Armstrong 1, NEc NW 3-27-13.

Harvey County—Gurdy et al's Lambaugh 1, SWc NE 4-24-1.

Sumner County—T. B. Slick's Conrad 1, NEc SE 24-32-2.

Russell County—Derby, Streeter & Stearns' Dodge 1, SEc SW SW 36-11-15w.

TEXAS

Archer County—Texas Co.'s, Wichita Falls, Texas, R. E. Hill 6, 2408 TE&L sur 1658 ft to N and 1374 ft to E line. R. R. Robertson's, Box 434, Wichita Falls, Texas, A. J. Love 19, blk 2, Holman sur, 300 ft E No. 2. Ramming & Petty et al's, Staley Bldg., Wichita Falls, Texas, W. L. Andrews 1, blk 182, J. T. Glass sur, 150 ft to N and 180 ft to E line. Gulf Prod. Co.'s, Fort Worth, Texas, A. P. Nichols 13, sec 37, Amer. Trib. sur, 300 ft W No. 12.

Note the Real Improvement This Valve Represents

Note first that the Roark has no cups or leather rings. Note next that it is OUTSIDE the working barrel, permitting a bigger ball and seat—less cut oil and B. S. Then follow the initials to the following facts:

a. Threaded to screw directly onto working barrel.

b. The extra heavy steel body is practically everlasting.

c. The perforated plate keeps the valve ball in place and absolutely protects ball and seat from injury.

d. The fluted ball guides prevent chattering regardless of plunger speed.

e. The ample oil passages prevent cutting of oil and enable the pump to operate at full capacity.

f. The California type ball will not pound the seat under any condition or at any speed.

g. Threaded for tubing anchor collar.

h. Threaded for over-size gas anchor.

i. Seat frame can be easily and cheaply renewed when necessary.

In every way Roarks are better.

Try them and see for yourself.

Texas Oil Pump Co

Waco, Texas

Waite Phillips Oil Co.'s, Tulsa, Okla., L. F. Wilson 15, sec 1, BBB&C Ry sur, 2460 ft to E and 180 ft to S line. Texhoma Oil Ref. Co.'s, Wichita Falls, Texas, W. H. Taylor A-5, blk 487, Amer. Trib. sur, 430 ft W No. 2. Marland Oil Co.'s, Cotton Exchange Bldg., Houston, Texas, W. J. Logan 1, sec 34, Clark & Plumb sur, 150 ft to E and 1597 ft to S line; Mrs. E. M. Krupka 3, J. Scott sur, 2250 ft to E and & 2400 ft to S line. Phillips Pet. Co.'s, Bartlesville, Okla., J. L. White 78, blk 35, Amer. Trib. sur, 300 ft S No. 76; J. L. White 79, blk 35, Amer. Trib. sur, 300 ft W No. 69; J. L. White 80, blk 35, Amer. Trib. sur, 278 ft S No. 75. Empire Gas & Fuel Co.'s, Staley Bldg., Wichita Falls, Texas, J. L. Anderson 4, sec 21, J. Anderson sur, 457 ft to W and 150 ft to S line. Riner & Bailey's, Wichita Falls, Texas, S. M. Gose 1, blk 8, Amer. Trib. sur, 150 ft S and W lines; L. F. Wilson 27, blk 29, Amer. Trib. sur, 300 ft NW No. 2. Jeffers & Jeffers,' Chenault Bldg., Wichita Falls, Texas, J. D. Lyle 1, sec 7, Hooper & Wade sur, 445 ft to N and 411 ft to E line. Ray Featherston Oil Co.'s, Inc., Staley Bldg., Wichita Falls, Texas, A. P. Nichols 11, blk 30, Amer. Trib. sur, 300 ft W No. 10. Texas Unity Oil Co.'s, Morgan Bldg., Wichita Falls, Texas, T. L. Dalton 1, 2450 TE&L sur, 750 ft to N and 150 ft to E line. Humble Oil & Refining Co.'s, Wichita Falls, Texas, C. O. Netherton 1, I. Holman sur, 1188 ft to W and 5588 ft to S line. Consolidated Oil Co. of Texas', Wichita Falls, Texas, G. B. Hamilton 5, I. Holman sur, 150 ft to N and 400 ft to E line. Thornton Lomax, Jr.'s, City Nat Bank Bldg., Wichita Falls, Texas, L. F. Wilson 2, sec 1, Amer. Trib. sur, 360 ft S No. 1. Barkley & Meadows', Wichita Falls, Texas, L. F. Wilson 9, sec 88, Amer. Trib. sur., 360 ft S No. 8; L. F. Wilson 10, sec 88, Amer. Trib. sur 150 ft to S and W lines. Childers Bros.' Staley Bldg., Wichita Falls, Texas, R. J. Claypool 1, Wm. Henry sur, 450 ft to E and 150 ft to S line. Petroleum Prod. Co.'s, City Nat. Bank Bldg., Wichita Falls, Texas, L. F. Wilson 8, sec 26, Amer. Trib. sur, 150 ft to N and W lines. Woodburn Oil Corp.'s, Dallas, Texas, L. F. Wilson A-21, Amer. Trib. sur, 150 ft to S and E lines. Texas Co. & Prairie Oil & Gas Co.'s, Ranger, Texas, G. M. Boren 1, R. Newman sur, 470 ft to W and 150 ft to N line.

Atascosa County—Witherspoon Oil Co.'s, San Antonio, Texas, R. A. Langley 6, 518 J. M. Sharp sur, 1550 ft to Nand 600 ft to W line.

Baylor County — Maer & Staniforth's, City Nat. Bank Bldg., Wichita Falls, Texas, W. B. Mills 3, 2428 TE&L sur, 300 E No. 2. Pet. Prod. Co.'s, City Nat. Bank Bldg., Wichita Falls, Texas, L. J. Kilcrease 1, 1809 TE&L sur, 150 ft to S and E lines.

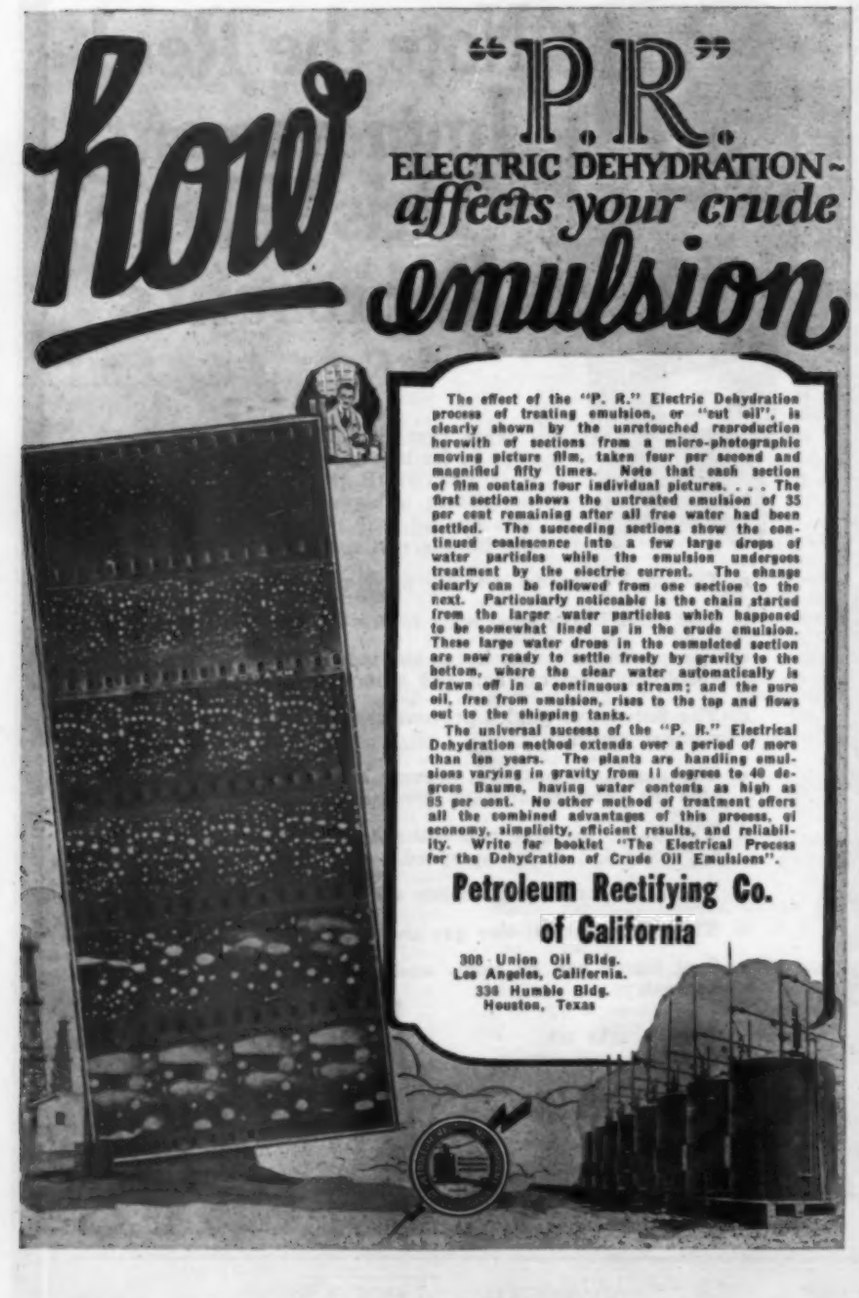
Brown County—L. F. Mendenhall Oil Co.'s, Cross Cut, Texas, J. W. Newton 8, Mm. Miller sur, 505 ft W and 650 ft to N line; J. W. Newton 9, Wm. Miller sur, 325 ft N No. 5.

Bexar County—Alamo Gas Co.'s, 808 East Houston St., San Antonio, Texas, E. Schiffers 5, 160 ft to W in center of line. W. M. Morgan's, 808 East Houston St., San Antonio, Texas, R. B. McCullough 1, 475 ft to N and 160 ft to E line.

Cherokee County—Colliton & Spiers, Jacksonville, Texas, R. F. Payne 1, sec 18, S. F. Ry sur, 807 ft to N and 376 ft to W line.

Callahan County—Smith & Williams' Wichita Falls, Texas, Yarbrough 7, 2290 TE&L sur, 450 ft to N and 750 ft to E lines; Yarbrough 8, same sur, 150 ft to N and W lines; Yarbrough 9, same sur, 150 to S and E lines; Yarbrough 10, same sur, 150 ft to S and W lines. J. H. Brower's, Cisco, Texas, Yarbrough 1, 2290 TE&L sur, 450 ft to E and 150 ft to S line; Yarbrough 2, same sur, 150 ft to S and E lines; Yarbrough 3, same sur, 150 ft to S and W lines. Chas. D. Robarts', Moran, Texas, J. M. Isenhour 6, 2273 TE&L sur, 150 ft to N and 450 ft to W line. Parkersburg Drilling Co.'s, Box 19, Cisco, Texas, E. W. Pruett 21, 2278 TE&L sur, 400 ft E No. 18; E. W. Pruett 22, same sur, 400 ft NE No. 21. Mitchell, Jones & May's, 1411 West Craig Place, San Antonio, Texas, W. T. Crosby 4, sec 8, Bayland Asy., 450 ft to E in center of line.; W. T. Crosby 5, sec 8, same sur, 00 3ft N No. 1. Brannon & Murray's, Eastland, Texas, Diller 7, sec 48, L. A. L. sur, 300 ft E No. 6. Texas Co.'s, Breckenridge, Texas, G. H. Clifford 3, 3151 TE&L sur, 300 ft E No. 1. Atha Kleiner Bros.' Cisco, Texas, J. T. Woods Est. 1, 2277 TE&L sur, 150 ft to N and W lines; J. T. Woods Est. 3, 2277 TE&L sur, 150 ft to N and 450 ft to W line. White Eagle Oil & Ref. Co.'s, Morgan Bldg., Wichita Falls, Texas, R. D. Williams 1, sec 64, Bayland Asy. sur, 450 ft to N and 150 ft to W line. S. J. Price et al's, 727 Essex St., Forth Worth, Texas, A. F. Scott 1, sec 36, D&D Asy. sur, 150 ft to S in center of line. Hamilton & Buffington's, Cisco, Texas, A. Abercrombie 1, 3155 TE&L sur, 750 ft to N and 150 ft to W line. Westheimer & Daube's, Ardmore, Okla., Mrs. L. M. Williams 1, sec 60, Bayland Asy. sur, 150 ft to N and 430 ft to E line; J. S. Hart 2, sec 59, Bayland Asy. sur, 510 ft to N and W lines. C. A. Montgomery's, Denton, Texas, S. W. Jobe 3, sec 4, Bayland Asy. sur, 150 ft to S and E lines. W. J. House's, Morgan, Texas, A. H. Wagley 2, 2039 TE&L sur, 300 ft E No. 1. Cribbs & Davidson's, Moran, Texas, S. S. Diller 1, sec 53, L. A. L. sur, 450 ft to N and E lines.

Caldwell County—Magnolia Pet. Co.'s, Dallas, Texas, C. H. Beaty 3, J. Burleson sur, 650 ft to NW and 150 ft to SW line. Sun Oil Co.'s, Dallas, Texas, A. H. Gomillion 27, P. Martinez sur, 300 ft NE No. 23. J. B. Pope's, Austin, Texas, C. H. Beaty 2, J. Burleson sur, 150 ft to S and E lines; C. H. Beaty 3, J. Burleson sur, 300 ft SW No. 1; C. H. Beaty 4, same sur, 312 ft SW No. 2; C. H. Beaty 5, same sur, 300 ft SW No. 3; C. H. Beaty 6, same sur, 300 ft SW No. 4; C. H. Beaty 7,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emulsion
The effect of the "P. R." Electric Dehydration process of treating emulsion, or "cut oil", is clearly shown by the unretouched reproduction herewith of sections from a micro-photographic moving picture film, taken four per second and magnified fifty times. Note that each section of film contains four individual pictures. . . . The first section shows the untreated emulsion of 35 per cent remaining after all free water had been settled. The succeeding sections show the continued coalescence into a few large drops of water particles while the emulsion undergoes treatment by the electric current. The change clearly can be followed from one section to the next. Particularly noticeable is the chain started from the larger water particles which happened to be somewhat lined up in the crude emulsion. These large water drops in the completed section are now ready to settle freely by gravity to the bottom, where the clear water automatically is drawn off in a continuous stream; and the pure oil, free from emulsion, rises to the top and flows out to the shipping tanks.
The universal success of the "P. R." Electrical Dehydration method extends over a period of more than ten years. The plants are handling emulsions varying in gravity from 11 degrees to 40 degrees Baume, having water contents as high as 95 per cent. No other method of treatment offers all the combined advantages of this process, of economy, simplicity, efficient results, and reliability. Write for booklet "The Electrical Process for the Dehydration of Crude Oil Emulsions".
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same sur, 300 ft SW No. 5; C. H. Beaty 8, same sur, 300 ft SW No. 6; C. H. Beaty 9, same sur, 300 ft SW No. 7; C. H. Beaty 10, same sur, 300 ft SW No. 8. Texas Co.'s, Houston, Texas, C. H. Beaty 13, J. Burleson sur, 302 ft SW No. 12. Gulf Prod. Co.'s, Houston, Texas, C. H. Beaty 14, J. Burleson sur, 300 ft SE No. 2; C. H. Beaty 15, same sur, 150 ft to S and E lines; C. H. Beaty 16, same sur, 300 ft SW No. 13 M. L. Brewer 6, F. Castillo sur, 300 ft SW No. 5; A. T. Cardwell 2, J. Burleson sur, 300 ft SE No. 1; A. T. Cardwell 3, same sur, 1000 ft (approx.) N and 150 ft to W line; A. T. Cardwell 4, same sur, 300 ft SE No. 3; A. T. Cardwell 5, same sur, 300 ft SE No. 4; A. T. Cardwell 6, same sur, 925 ft SE No. 2; W. H. Riddle 1, Wm. Templen sur, 1338 ft to E and 760 ft to N line.

Coleman County—K. K. Kitchell's, Brownwood, Texas, W. T. Burns 1, No. 163, Wm. Mason sur, 900 ft to E and 520 ft to N line. Shaw, Fox & Adams', Burkett, Texas, Wm. Key 2, No. 168, A. Wickson sur, 450 ft to N and 300 ft to W line. Canyon Oil & Gas Co.'s, Cross Plains, Texas, W. T. Burns 9, Wm. Mason, 300 ft E No. 6; J. W. Harris 3, same sur, 300 ft N No. 2; J. W. Harris 4, same sur, 300 ft N No. 3; W. T. Burns 10, Wm. Mason sur, 300 ft N No. 9.

Clay County—L. M. Emlet's, St. Louis, Mo., Panhandle 14, blk 47, P. C. S. L. sur, 1050 ft to W and 150 ft to S line. W. A. Brady's, Bixby, Ardmore, Okla., Lockridge Oil Co. 23, blk 54, P. C. S. L. sur, 225 ft S No. 15.

Duval County — Humble Oil & Ref. Co.'s, Houston, Texas, Schallert 2, SM&S sur, 650 ft to S and 1200 ft to E line; Welder-Wood 1, S. Alexander sur, 4000 ft to W and 2500 ft to N line.

Eastland County — R. C. Parker's Wichita Falls, Texas, P. Browning 4, blk 87, G. E. L. Co.'s, 300 ft N No. 3. Mardon Co.'s, F. and M. Bank Bldg., Fort Worth, Texas, W. B. Williams 1, W. F. Holliday 1200 ft to N and 500 ft to E line. McWilliams & Stiles, Eastland, Texas, R. W. Smith 2, 472 S. P. Ry sur, 450 ft to N and 1350 ft to E line. Magnolia Petroleum Co.'s, Dallas, Texas, E. Bishop 1, A. Smelzer sur, 500 ft to N and W lines.

Fort Bend County — Union Sulphur Co.'s, Humble Bldg., Houston, Texas, T. W. Davis 32, M. Young sur; T. W. Davis 33; same sur; T. W. Davis 34, same sur.

Gonzales County — R. M. Bleakie's, Gibbs Bldg., San Antonio, Texas, J. S. Moore 1, J. Johnson sur, 500 ft to S and W lines.

Garza County—Choate & Henshaw's, Box 537, Colorado, Texas, Connell & Clark 1, sec 55, GH&H Ry sur, 1320 ft to S and E lines.

Hardin County—S. R. Buchanan's, Batson, Texas, Gordon-Buchanan 83, J. Milholme sur, 130 ft N No. 47. Ada Belle Oil Co.'s, Batson, Texas, Paraffine 98, J. Knight sur, 50 ft to S and 32 ft to E line. Paggi Bros. Oil Co. et al's, Beaumont, Texas, Lewis Hrs. 7, blk 9, M. E. Hopkins sur, 480 ft to E and 100 ft to S line.

Howard County—Choate & Henshaw's, Box 537, Colorado, Texas, M. H. O'Daniel 1, sec 34, T&P Ry, 1320 ft to S and E lines.

Haskell County—H. T. Wolfe's, Houston St., Fort Worth, Texas, R. V. Calvert 1, J. Hauchin sur, 250 ft to S and E lines.

Harris County—Texas Co.'s Houston, Texas, House 19, M. Owens, 350 ft NW No. 7.

Irion County — Virginia Texas Petroleum Co.'s Charleston, W. Va., Mrs. H. C. Fuller 1, sec 1227, GC&SF Ry sur, 240 ft to N and E lines.

Jackson County—Houston Oil Co.'s Houston, Texas, L. Rogers 1, N. Rodriguez sur, 150 ft to S and E lines.

Jefferson County—Stella Oil Co.'s, Park & Austin St., Beaumont, Texas, Keith & Ward 7, blk 32, J. A. Veatch sur, 75 ft NW No. 2.

Jack County — J. D. Robinson's, Wichita, Kansas, W. Scott 1, J. B. Atkinson sur, 150 ft to S and W lines. Humphreys Corp.'s, Mason Bldg., Houston, Texas, J. J. Campbell 1, H. M. Riley sur, 6200 to S and 150 ft to E line.

Jim Hogg County—O. W. Killam's, Box 299, Laredo, Texas, A. Martinez 11, 256, 300 ft S No. 8; J. Vela 2, 580, 150 ft to S and W lines.

Limestone County—J. K. Hughes Dev. Co.'s, Mexia, Texas, Ed Ellis 17, P. Varela sur, 700 ft NE No. 9. Magnolia Pet. Co.'s, Dallas, Texas, J. Desenberg 1, P. Varela sur.

Live Oak County—H. Coquat's, Three Rivers, Texas, Industrial Add. 1, Wm. O. Docharty sur, 170 ft to W and 700 ft to N line. Houston Oil Co.'s, Houston, Texas, H. Cartwright 10, J. M. Colchado sur, 1200 ft NE No. 4.

Liberty County—Paddock & McRae's, Second Nat. Bank Bldg., Houston, Texas, Invincible 3, sec 125, H&TC Ry sur, 120 ft N No. 2. Gulf Prod. Co.'s, Houston, Texas, Phoenix 55, J. Devore sur, 300 ft E and 300 ft N of No. 53. Sinclair Oil & Gas Co.'s, Chronicle Bldg., Houston, Texas, Condict Fee 4, D. Minchey sur, 200 ft W No. 3.

Milam County—J. W. Allen's, Box 534, Luling, Texas, J. Brown 1, J. Marshall sur, 300 ft to S and W lines. J. K. Hughes Dev. Co.'s, Mexia, Texas, J. W. Foster 1, J. Gafford sur, 150 ft to N and 800 ft to E lines. Junior Oil Co.'s, Rockdale, Texas, Hamilton 1, A. Acosta sur, 150 ft to S and E lines. Texas Pet. Dev. Co.'s, Box 809, Cameron, Texas, W. M. Phillips 8, H. W. Chambers sur, 450 ft to S and E lines. Hope Oil Co.'s Rockdale, Texas, H. A. Branch 1, Chambers & Arnett sur, 150 ft to S and W lines.

Marion County—Tremont Pet. Co.'s, Slattery Bldg., Shreveport, La., Mebane-Stiles 2, N. Gupton sur, 908 ft to S and 250 ft to E line.

Montague County — Texhoma Oil & Ref. Co.'s, Wichita Falls, Texas, J. W. Rowland A-1, J. Chambliss sur, 150 ft to E and 4514 ft to S line.

Mitchell County—Choate & Henshaw's, Box 537, Colorado, Texas, W. T. Scott 1, sec 32, T&P Ry sur, 1320 ft to S and E lines; Eastland Oil Co.'s, W. T. Waggoner Bldg., Fort Worth, Texas, W. D. Keynard 4, sec 15, T&P Ry sur.

McLennan County—E. Croft's, Waco, Texas, Mrs. G. W. Anderson 1, R. eorge sur, 1200 ft to S and W lines.

Navarro County—C. E. Rodgers', City Nat. Bank Bldg., Wichita Falls, Texas, A. M. Milli-

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of any

Tubing or Sucker Rod Hook

Ratigan Shock Absorber

Connect the Ratigan No. 1 Shock Absorber with any tubing or Sucker Rod Hook in the field and you have a "spring hook" with all its advantages.

But that is only one use of the Ratigan Shock Absorber. It prolongs the life of practically every tool in the string by taking the shock of the "pick-up" off the rods, which shock ordinarily is transmitted through the entire pumping equipment with the resultant wear, tear, crystalization and breakage.

The Ratigan Shock Absorber will prevent many rod jobs — save many costly repair bills — eliminate many delays — pay for itself many times over.

WRITE FOR INFORMATION

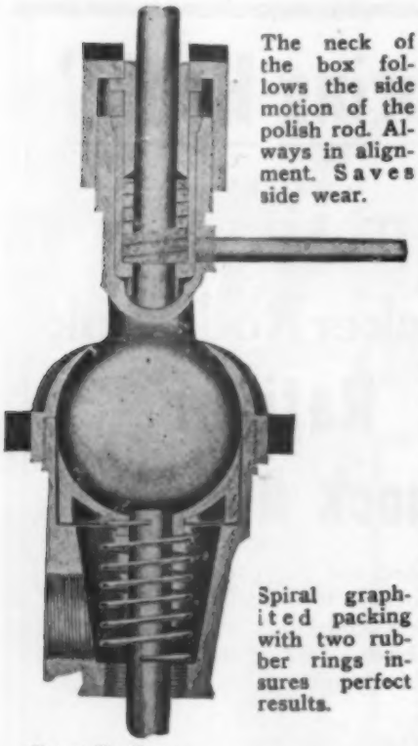
J. P. Ratigan

1213 Santa Fe Avenue
Los Angeles, Calif.

Mid-Continent Fields and Rocky Mountain District: Frick-Reid Supply Co.
Pacific Coast Fields: All Supply Houses

Taking the Grief Out

With the Fawcett Self-Aligning Stuffing Box in use your sucker rods can be pulled with ease. Absolutely does away with vexatious delays, loss of time and shut-downs.



The neck of the box follows the side motion of the polish rod. Always in alignment. Saves side wear.

Spiral graphited packing with two rubber rings insures perfect results.

Patent Pending

The Fawcett Self-Aligning Stuffing Box does reduce operating costs and does effect a substantial saving in change of packing. Too, loss of production is virtually eliminated.

Some of the largest companies in the field have adopted the Fawcett as standard equipment. Their saving can be your saving. Write for descriptive folder.

George J. Maloney
223 Higgins Bldg. Los Angeles, Calif.
Pacific Coast Distributor

A. W. FAWCETT
Manufacturer
Yale, Oklahoma.

gan 1, M. Lathim sur, 318 ft to N and 85 ft to W line. Texas Co.'s, Houston, Texas, R. D. Fleming 14, J. Harris sur, 150 ft S and E lines. Gulf Prod. Co.'s, Houston, Texas, R. Smith 13, Taylor and Haven sur, 438 ft to E and 150 ft to S line; M. Hillburn 3, Wm. Hudson sur, 300 ft N No. 1. Sun Oil Co.'s, Dallas, Texas, M. C. Hillburn 4, Wm. Hudson sur, 300 ft NW No. 3; M. C. Hillburn 3, same sur, 150 ft to S and E lines. Humble Oil & Ref. Co.'s, Houston, Texas, L. T. Davis 18, J. B. Barry sur, 212 ft N No. 5; L. T. Davis 19, same sur, 212 ft N No. 7; S. D. Ramsey A-18, Hrs. J. Smith sur, 258 ft N No. 1; same sur, 255 ft N No. No. 7; S. D. Ramsey 20, same sur, 255 ft E No. 8; S. D. Ramsey 21, same sur, 255 ft E No. 9.

Nacogdoches County — Richard Eke's, Alto, Texas, J. D. McKnight 1, J. Durst sur, SE cor.

Orange County — Sinclair Oil & Gas Co.'s, Chronicle Bldg., Houston, Texas, J. W. Turner 1, Wm. Dyson sur, 1211 ft to E and 182 ft to N line. Rycade Oil Corp.'s, Houston, Texas, Cow Bayou C-1, Cow Bayou sur, 150 ft to N and 20 ft to E line. Gulf Prod. Co.'s, Houston, Texas, O. Chesson 8, Wm. Dyson sur, between No. 3 and No. 6.

Panola County—Magnolia Pet. Co.'s, Dallas, Texas, M. Horton 1, H. Anderson sur, 263 ft to N and 300 ft to E line.

Reagan County—Marland Oil Co.'s, Cotton Exchange Bldg., Houston. Texas, M. J. Wilson 1, sec 1199 G.C.&S.F. Ry sur, 450 ft to N and E lines.

Refugio County—Houston Oil Co.'s, Houston, Texas, F. B. Rooke 1, Thos. Mullen sur, 560 ft to N and 800 ft to W line.

Shackelford County—Homer H. Chapman's, Dallas, Texas, F. W. Alexander 2, sec 15, L. A. L. 300 ft E No. 1. Waddington & Wanamaker's, Box 838, Moran, Texas, S. S. Diller 1, sec 41, L. A. L. sur, 150 ft to N and 600 ft to W line. Duffy Tollett's, Wichita Falls, Texas, C. B. Snyder 1, sec 33, L. A. L. sur, 150 ft to E and 450 ft to S line. G. A. Teague Co.'s, Mobley Hotel, Cisco, Texas, Mrs. E. Ragal 1, sec 89, Univ. Lands sur, 450 ft to W and 150 ft to S line. Texas Co.'s, Breckenridge, Texas, S. S. Diller 26, sec 42, L. A. L. sur, 300 ft N No. 25. L. B. Tannehill's, Albany, Texas, R. J. Moberly 14, sec 12 T&P Ry sur, 400 ft E No. 13. Tracey Greer's, Trustee, Parker Bldg., Schenectady, N. Y. L. H. Hill 1, sec 40, Blind Asy. sur. 150 ft to N and 200 ft to E line. J. A. Jones', Moran, Texas, C. B. Snyder 1, sec 39, L. A. L. sur, 150 ft to S and W lines.

Stephens County—Prairie Oil & Gas Co.'s, Ranger, Texas, J. H. Ware 4, sec 66, T&P Ry sur, 250 ft to E and 300 ft to S line. G. O. Bateman's, Box 87, Breckenridge, Texas. Whalen-Wilson 1, 3393 TE&L sur. 330 ft to S and W lines. J. H. Williams', 3738 Armstrong Drive, Dallas, Texas, N. J. Rosenquest 11, No. 4, blk 6, 700 ft to N and E lines. Strawn Pet. Co.'s, Strawn, Texas, J. N. Stewart 3, sec 75, T&P Ry sur, 2100 ft to E and 320 ft to S line. Mid-Kansas Oil & Gas Co.'s, Tulsa, Okla., S. H. Hill 6, 1122 TE&L sur, 2350 ft to S and 150 ft to E line.

Sterling County — Chas. L. Harty's, Dallas, Texas, C. C. Reynolds 1, sec 43, H&TC Ry sur, 660 ft to N and E lines.

Throckmorton County—Associated Petroleum Co.'s, N. P. Anderson Bldg., Fort Worth, Texas, Reynolds Cattle Co. 15, sec 22, C. T. Ry sur, 800 ft to N and 900 ft to W line.

Upton County—Geo. B. McCamey et al's Texas Nat. Bank Bldg., Fort Worth, Mrs. M. L. Baker 1, sec 8, B. R. sur, 320 ft to S and E lines.

Wichita County—Humble Oil & Ref. Co.'s, Wichita Falls, Texas, Kemp & Allen A-4, blk 27, W. V. F. L. sur, 300 ft S No. 3. Petroleum Prod. Co.'s, City Nat Bank Bldg., Wichita Falls, Texas, J. A. Kemp B-10, blk 29, W. V. F. L., 150 ft to N and E lines. Homer Lee's Wichita Falls, Texas, J. J. Weitner 8, BBB&C Ry sur, 150 ft to S and W lines. Williams, Conrey & McConnell's, 821 Indiana Ave., Wichita, Falls, Texas, E. Horton 5, BBB&C Ry sur, 150 ft to W and 450 ft to S line. Geo.

Should Small Extravagances Be Overlooked?

Here's One That's Been Hiding For Years

In the rush for big gains in the distance it is so easy to overlook small profits at our very doors! How many hundreds of dollars could be added directly to the profits by the reduction of small operating expenses is a matter that every company would do well to investigate.

As a starter, we submit to your attention the matter of pulling costs. Pulling expense is necessary, but is yours as low as it can be made?

In pulling standing valves, do your men make TWO complete runs of the rods, in and out—with all the time-waste and production-loss this represents—or do they do as hundreds of others do: SAVE THAT EXTRA RUN?

With the

NORRIS
Clutch Type
STANDING VALVE PULLER

installed, a few extra turns of the rods bring the clutch and clutch socket into engagement. The standing valve comes up with the rods—half the usual cost is saved.

The upper (clutch socket) portion of the Norris Standing Valve Puller is screwed into the traveling valve in place of the ordinary valve bottom. The lower (clutch) portion is fastened to the standing valve crown. A few extra turns of the rods bring clutch and socket into engagement, after which the standing valve comes up with the rods.

Every time you use this device it pays for itself! Is there any better place to start cashing in on small economies?

We cover this product with the full guarantee of a company known for 17 years for its square-deal policies. At your supply house or direct.

NORRIS BROTHERS, Inc.
Manufacturers of Oil Well Pumping Equipment
Robinson, Ill.
Mid-Continent Warehouse: Fort Worth, Texas.

Are Your Wells Slowing Down?

Give them a new lease of life. Bring them back to normal with a

Standlee Swivel Swab

Some users tell us they are swabbing declining wells and bringing them back with the Standlee.

Sounds reasonable, doesn't it?

It's an all around swab that is winning a host of enthusiastic friends throughout the industry.

There must be a reason for it. Design and quality may be responsible. At least it's worth investigating.

At Your Supply Store

Cunningham products are painted green

CUNNINGHAM CO.

212 So. Norfolk

Tulsa Oklahoma

Phone 2-1727 Night Phones 3-1411 and 6954

L. Pace's, Staley Bldg., Wichita Falls, Texas, T. F. Mitchell 2, blk 9, P. Castleman sur, 150 ft to S and E lines. W. L. Mann's, 710½ Ohio St., Wichita Falls, Texas, Roller Est. 9, J. Mumpford sur, 310 ft SE No. 9. Helene Oil Corp.'s, Staley Bldg., Wichita Falls, Texas, O. L. Clark 8, No 3, S. Anderson sur, 300 ft W No. 7. Bonchil Co.'s, Staley Bldg., Wichita Falls, Texas, H. Beach 25, No. 4, C. T. Ry sur, 300 ft N No. 24. Fresno Oil Co.'s, Wichita Falls, Texas, L. F. Ramming 18, HT&B Ry sur, 602 ft E No. 9. Ferguson, Hawkins & Hester's, Staley Bldg., Wichita Falls, Texas, J. A. Watkins 11, No. 46 W. V. F. L. sur, 50 ft S No. 8. Red River Oil Co.'s Box 712, Tulsa, Okla., B. A. Bywaters 80, S. P. Ry sur, 900 ft to N and 150 ft to W line. Ascot Co.'s, Wichita Falls, Texas, J. E. Roller Est. 31, W. A. Grady sur. J. J. Jenkins', Morgan Bldg., Wichita Falls, Texas, E. E. Hardin 1, O. Farrish sur, 965 ft to E and 150 ft to S line. T. F. Hunter's, Wichita Falls, Texas, A. F. Dodson 15, Day Land & Cattle sur, 363 ft to N and 1570 ft to W line. Mitcham & Logan's, Burkburnett Bldg., Wichita Falls, Texas, J. Ellison 1, sec 20, T. C. S. L. sur, 150 ft to N and E lines. Bonner et al's Staley Bldg., Wichita Falls, J. J. Perkins 1, P. Corrigan sur, 150 ft to S and E lines. O'Donohoe-Gates Drilling Co.'s, City Nat. Bank Bldg., Wichita Falls, Kemp & Allen 5, sec 11, W. V. F. L. sur, 300 ft W No. 3; Kemp & Allen 6, sec 11, same sur, 300 ft S No. 4. J. S. Easton's, Box 665, Wichita Falls, Texas, W. T. Waggoner 3, A. Gibson sur, 492 ft to N and 450 ft to E line. Staley & Wynne's, Staley Bldg., Wichita Falls, Texas, G. W. Wolf 1, blk 49, R. R. V. L. sur, 450 ft to E and 150 ft to S line.

Wilbarger County—Prairie Oil & Gas Co.'s, Ranger, Texas, Waggoner B-1, sec 44, blk 4, H&TC Ry sur, 1320 ft to S and 330 ft to E line. Len Cook Oil Co.'s, Electra, Texas, W. T. Waggoner 6, sec 30, H&TC Ry sur, 350 ft N No. 6. R. M. Waggoner's, Wichita Falls, Texas, Bond, Hawkins & Williams 3, sec 100, H&TC Ry sur, 1160 ft to W and 150 ft to N line. Barkley & Meadows', Wichita Falls, Texas, W. H. Stephens A-3, sec 83, H&TC Ry sur, 490 ft to E and 150 ft to S line. Gulf Prod. Co.'s, Fort Worth, Texas, W. T. Waggoner O-1, sec 50, H&TC Ry sur, 150 ft to N and 2135 ft to W line; W. T. Waggoner R-3 sec 50, H&TC Ry sur, 150 ft to N and W lines. Ray & Massie's, Staley Bldg., Wichita Falls, Texas, Bond 5, sec 100, H&TC Ry sur, 450 ft to E and 150 ft to S line. Maer & Staniforth's, City Nat. Bank Bldg., Wichita Falls, Texas, W. T. Waggoner 1, sec 10, H&GN Ry sur, 150 ft to N and E lines. Humble Oil & Ref. Co.'s, Wichita Falls, Texas, W. T. Waggoner 2, sec 50, H&TC Ry sur, 340 ft N No. 1.

Wilson County—R. M. Bleckley's Gibbs Bldg., San Antonio, Texas, H. F. Denning 2, C. W. Parrott sur, 660 ft to N and 250 ft to E line.

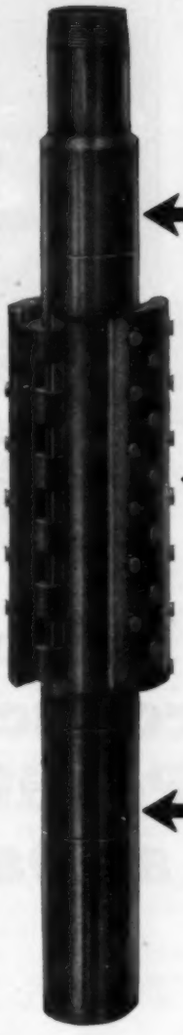
Wharton County—J. F. Weed's, Beaumont, Texas, Feltz 1, S. F. Austin sur, 750 ft to W and 60 ft to S line.

Webb County — Wm. F. Morgan's, Travis Bldg., San Antonio, Texas, A. C. de la Garza 1, sec 336, blk 8, 150 ft to N and 450 ft to E line.

Young County—Sun Oil Co.'s, Dallas, Texas, A. Dietrich 1, sec 4, BBB&C Ry sur, 150 ft to S and W lines. Humble Oil Ref. Co.'s, Houston, Texas, L. L. Kilcrease 1, 1809 TE&L sur, 150 ft to S and W lines; J. F. Mercer 5; sec 1, J. Poitevent sur, 300 ft E No. 2; J. E. Mercer 6, sec 1, same sur, 300 ft E No. 5. O. L. Dala's, Staley Bldg., Wichita Falls, Texas W. F. Keathley 1, 153 TE&L sur, 150 ft to N and W lines. Texas Unity Oil Co.'s, Morgan Bldg., Wichita Falls, Texas, I. Hausler 6, sec 1, J. Poitevent sur, 300 ft N No. 3. M. J. Bashara's, Wichita Falls, Texas, Fee 2, 3409 TE&L sur, 300 ft S No. 1. C. V. Welch et al's, Box 1587, Breckenridge, Texas, C. B. Cathey 1, sec 68, TE&L sur, 150 ft to N & E lines. C. Mooers et al's, Wichita Falls, Texas, A. F. Ikert 5, I. Hobman sur, 919 ft to W and 150 ft to S line. Bolin & Beavers', Graham, Texas, G. W. Dunagan 1, 170 TE&I sur, 150 ft to N and E lines.

BACK OFF

That Stuck Pipe With Edwards Reversing Tool


Coupling for drill stem connection rotates to right
Hinged wings when turned to right open and anchor to casing—causing
The lower part to operate to the left, recovering stuck or twisted off pipe and casing

Can be released at will. Will operate with strain on pipe. Has wide range of adjustment. Makes left-handed pipe unnecessary. Successful operations prove statements.

Get H-E Tools

At your supply store, or write, phone, or wire.

HOUSTON ENGINEERS, Inc.

Phone Preston 1927
Night, Taylor 1996
Postoffice Box 276
HOUSTON, TEXAS

Patented—Patents Pending

Waukesha Units near Lockhart, Texas, Pumping Water 8 Miles

Making Production Possible at Dale

Dale Field, near Lockhart, Texas, was as dry as a bone, with the nearest water eight miles away. Production depended on water. Within five days after they were ordered, a pair of Waukesha "Ricardo Head" Oil Field Power Units were pumping, against 550 pounds pressure, 6000 to 7500 barrels of water per day into the field. Thus drilling operations were possible because these quickly installed, easily portable units were available. Waukesha Oil Field Power Units are economical and reliable in operation.

Every day, Waukesha Oil Field Power Units are demonstrating unusual adaptability to oil field work in many ways. Write for the practical Oil Field Bulletin.

WAUKESHA MOTOR COMPANY

Waukesha, Wisconsin

New York City	Hartford	Kansas City	Denver	Tulsa	Houston
Aeolian Building	*K. B. Noble Co.*	*V. L. Phillips Co.*	*Western Equip. Co.*	*C. F. Camp Co.*	*Portable Rotary Rig Co.*

Exclusive Builders of Heavy Duty Gasoline Engines for Nearly Twenty Years

NEW EQUIPMENT, CATALOGS, BULLETINS, BOOKS

Special Features Embodied In Lunkenheimer Valves

The Lunkenheimer Company of Cincinnati, Ohio, manufacturers of valves and engineering appliances, has just released to the market an entirely new line of iron body gate valves containing many structural features which will appeal to valve users.

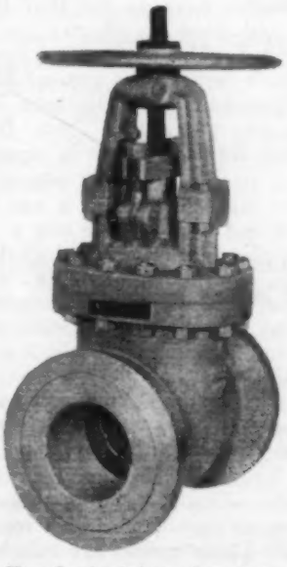
The valves are made in two types, stationary stem, inside screw and rising stem, outside screw and yoke. Either type may be had in the standard pattern for 125 pounds working steam pressure, or in the extra heavy pattern for 250 pounds, total temperature being 450 degrees.

Strength and rigidity to the maximum degree are insured by the ample thickness of the body and the proper distribution of the metal, together with large fillets.

All parts are renewable, and this includes the seat rings. Attention is directed to the manner in which the seat rings are held in place: They form a joint with the body by solidly backed walls, thereby preventing any possibility of their becoming loose or being wedged out of place.

Ribs which act as guides for the disc and which are cast integral with the body, are machined, as are also the grooves in the disc which engage the ribs. This construction eliminates excessive wear and marring of the seating surfaces incident to the dragging of the disc upon the seats.

The disc of the inside screw, stationary stem pattern, is hollowed only sufficiently to receive the stem, while the disc of the outside screw and yoke, rising stem pattern is solid throughout. The advantage of a solid disc is that when expansion and contraction occur, both sides of the disc are simultaneously affected, thereby preventing distortion or fracture and insuring tight seating surfaces.



New Lunkenheimer Gate Valve

Large packing surface is provided by the deep stuffing box. The stuffing box is repackable under pressure when the valves are wide open, a tight seat being formed between the top of the disc and the bottom of the stuffing box bushing.

One of the novel features is that of the two lugs provided within the yoke arms directly above the stuffing box gland. When it is necessary to repack the valve, the gland is raised above the lugs, and by slightly turning it, the flange on the gland will rest upon these lugs, thereby dispensing with the usual method of tying up the gland while the stuffing box is being repacked.

Convenience of repacking is also afforded by the use of swing bolts which retain the stuffing box gland. To raise the gland, only requires loosening of the nuts sufficiently to permit of swinging the bolts aside. Entire removal of the nuts is not necessary.

Additional information will be provided by the company upon request.

Special Oil Field Cement Introduced in Mid-Continent

A cement that is especially adapted for use in the oil fields now is being marketed in a new moistureproof container by the Oklahoma Portland Cement Company of Oklahoma City, under the trade name of O. K. Super Oil Well Cement. The cement is packed in a handy bag with walls made of five separate plies of tough paper, rendering the package moistureproof. This preserves the maximum hardening power in the cement right up to the time it is used.

O. K. Super Oil Well Cement is highly resistant to salt water, as when mixed with fresh water and properly placed in the well, submersion in salt water does not affect it. O. K. Super Oil Well Cement also is extremely fast in hardening, developing 80 per cent of its total ultimate strength in 72 hours.

The manufacturers of this O. K. cement have processed the making of the product so as to develop superstrength when used neat, i. e., with no sand mixed with it. The cement also is ground fine, so that from 88 to 90 per cent of it will pass through a 200-mesh sieve.

Another characteristic of O. K. Super Oil Well Cement is that when mixed with 40 per cent water it develops a neat compressive strength at 72 hours of more than 5000 pounds per square inch. One large oil company has prepared its own specifications for

the cement it uses, and these call for a compressive neat strength at 72 hours of only 2000 pounds per square inch when the cement is mixed with 40 per cent water by weight of the cement. So that O. K. Super Oil Well Cement has been perfected to afford maximum strength when pumped down into the hole.

O. K. cement is a complete oil well cement in itself, and does not require any other material to be added to bring it to its maximum stage of efficiency. It develops its 72-hour strength without any recourse to any added material, save water alone.

The Oklahoma Portland Cement Company has headquarters in Oklahoma City and branch offices in convenient points in the Mid-Continent field. C. D. Nichols is manager of sales of the company and the plant is located at Ada, Oklahoma.

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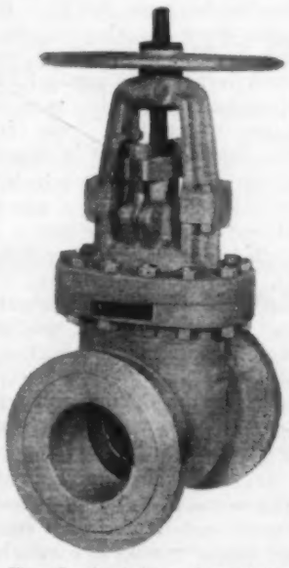

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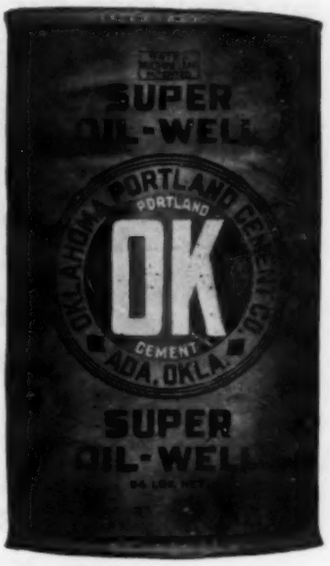

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GEOPHYSICAL EXAMINATION OF OIL PROSPECTS BY PROVEN SCIENTIFIC METHODS

We are prepared to undertake Contracts for the exploration of Oil Deposits (Structures and Salt Domes) by the gravitational, seismic, electrical and magnetic Methods.

NORTH AMERICAN EXPLORATION CO.
HOUSTON, TEXAS

FOR SALE—LANDS
Attention Oil and Gas Prospectors

The United Lands Co., Inc., own the following land in Louisiana:

In Ascension Parish	8495 Acres
St. James Parish	235 Acres
Winn Parish	100 Acres
Above lands crossed by L. R. & N. R. R.	
Avoyelles Parish	89 Acres

The Empire Gas & Fuel Company paid a large rental on the Ascension and St. James Parish lands, drilled two wells, abandoned their lease.

It takes cash and courage to drill 13 dry holes as at Urania but the 14th struck oil, and it is possible, if not probable that oil or gas does underlie this Ascension Land and that other or deeper wells, if sunk, may richly reward the effort. One artesian well on this property has flowed for 14 years and is still flowing natural gas.

The Ascension and St. James land is largely cut over swamp land in a solid body, has 16 houses thereon and a five acre orange bearing grove, will sell land and improvements, reserving mineral rights, or will lease for oil or gas development.

The Winn Parish tract near Atlanta, La., is high land and not far from the Urania field.

The land in Avoyelles is cut over swamp located near the town of Cottonport on Texas & Pacific Railroad.

Disposal of land holdings as an entirety is preferred, call on or address

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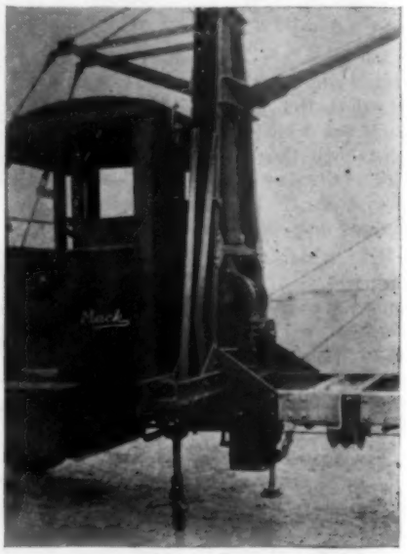
Truck Crane Adaptable For Oil Field Lifting

To meet the constantly growing demand for a lighter truck crane combination, the International Motor Company has developed a crane mounted on Mack trucks of one and one-half, two, and two and one-half tons capacity.

This crane, primarily designed for the purpose of unloading 1000-gallon fuel oil tanks from gondola cars, is adaptable to many other uses, such as handling gasoline drums, barrels, field tanks, or anything weighing upward to 2500 pounds.

The equipment consists of a mast, braced and anchored to the chassis frame; a special drum-winch and two booms. The long boom measures 13 feet by 3½ inches, and has a 16-foot clearance from the ground, while the short boom, measuring 8 feet by 11½ inches, has a 10-foot ground clearance. Both booms have an 8½-foot lateral radius, and since the shorter one may be operated with the mast in a lowered position, it is used for general lifting; but where additional clearance is required, as in hoisting from freight cars, etc., the long boom is necessary.



Light Truck Crane Good for Oil Field Work

Power is applied to the winch from a power take-off through a one-speed forward and reverse gear and a chain drive to the winch-worm sprocket. The controls, consisting of motor clutch and gear shift, are located directly behind the cab, on the left side of the mast; and attached to the back side of the cab is an auxiliary gas control which permits the operator to regulate the engine speed without leaving his position at the control levers.

To insure rigidity of the chassis while the crane is being operated, two jack screws support the mast from the ground. These screws are attached to the cross-members under the mast by means of a swivel arrangement, so that

when not in use, the free ends may be fastened to brackets on the sides of the frame.

The entire assembly may be mounted on any standard Mack truck with but little alteration to the body and none to the cab.

Further information can be secured from the International Motor Company, 25 Broadway, New York City.

Chemical Company Opens Sales Offices in Tulsa

Tulsa, Okla.—On July 1, L. G. Blodgett, formerly field superintendent for the H. F. Wilcox Oil and Gas Company, became president and active general manager of the Mid-Continent Konset Company, with general sales offices in the Kennedy Building.

The Mid-Continent Konset Company is distributor for the states of Oklahoma, Kansas, Colorado, and New Mexico, for Konset and Kleen-a-Well, and other chemicals and technical products manufactured by the Sullivan Company, Memphis, Tennessee.

Increasing popularity of these products has necessitated the enlargement of the factory and by the reorganization of distribution, with additional facilities, the Sullivan Company is in position to render the maximum of service to the oil operator, both domestic and foreign.

T. E. Barner, formerly field representative for the Sullivan Company, was recently promoted to the position of general sales manager, and will make an extended trip through the oil fields in the near future.

Big Shipment of Gaso Pumps To Midwest at Casper

Tulsa, Okla.—The Gaso Pump and Burner Manufacturing Company has just received a second order for 60 units of the 4 x 10 Gaso duplex motor-driven power pumps from the Midwest Refining Company of Casper. Previously 50 of these units were delivered to the Wyoming concern. The pumps are being used in the electrification of the Midwest properties, following the completion of the power project built in the Salt Creek field.

National Supply Company Opens Panhandle Branch

Fort Worth, Texas.—A distributing branch of the National Supply Company has been established at the town of Panhandle, in the Panhandle district of Texas, where considerable new field work has been taking place lately, with both cable tools and rotary equipment in use. L. R. Foraker, formerly at the Electra branch of the National, has been placed in charge of the Panhandle warehouse and office.

One Man Control

Note that the two controls are both in easy reach of the operator. One lever governs engine speed—the other the friction.

With the
Bradford-Dewey Friction Hoist

This equipment is saving from 25% to 50% in tubing, rod pulling and shutdown costs for many of the biggest operators.

Such savings are interesting. They mean something to you. Such an equipment is worth investigating.

Simple to operate . . . powerful . . . speedy . . . economical . . . this Hoist is winning a host of friends wherever it is shown at work.

Made in two types: Truck type with a lifting pull of five tons; tractor type with a lifting pull of fifteen tons.

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Charcoal Iron **Lapwelded Steel**

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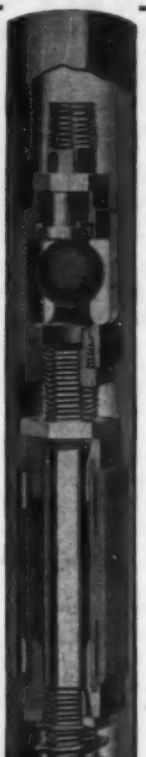

Automatic unloading device governs amount of fluid you can lift.

Rubber is in action only when lifting fluid, longer life rubbers.

Swivel in cage ensures less wear on lines and maximum efficiency of rubbers.

Acts as packer if well starts to flow while running as fluid passes thru mandrel to ball and out.

You can swab rotary wells and in different weight casing successfully.

Write for price and details.

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Solid Woven Cotton Belting

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If you have never used a STANLEY belt, write your own ticket for what service a belt ought to give you. Then ask a Stanley user and see if STANLEY hasn't already given him more service than your "ticket" reads.

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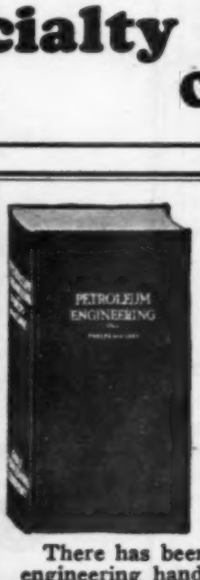

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Say you saw it in The Oil Weekly

LETTERS OF Paul Peebles P.S.G.

mi deer cleopatry

well cleo hunny I hav had a cupple of more letters from wimmin whitch is jealeous of you and yore & mi happiness, but hunny yu no me well enuff 2 no that I am not goin 2 pay them no mine because yu are mi own trew sweety and cant nuthin or noboddy ever come between us if yu will just leev that onnery slim alone and make him leev yu alone. of corse I do not pay no atenshun 2 what he says about what he will do 2 me if he ever sees me in goose creek because I am not skared of him & his hole generation, but I shore wood hate 2 hav you embarressed bi me & him havin a fite about yu & the hole thing cummin up in cort after I had killed him like a dog like he ort 2 be did. so that is one reesen hunny that I did not cum down 2 sea yu this last week but went 2 west columbia insted. & if yu think I went out there 2 sea a woman well yu are badly mistaken, because I did not and I did not even see enny woman atall much less one that wood cum up 2 yu. I went out there on some scientifick bizness. I gess yu wood like for me 2 tell yu all about mi trip & what I seen.

well I left huston pretty late friday evenin & driv down there & looked around the town a little & then cum back acrost the rivver on the bridge & camp out on the rivver bluff in a kinder of a mosquito rallyin place & it must a bin sum kind of a convenshun of them. I had a cupple of fellers with me but that dont intrest yu none on account yu do not no them.

well ennyway we was campin out there on the rivver & I was lookin up in the high dome of the heavins at the stars & seein how menny combinashuns of them wood frame yore sweet face & then I got 2 wonderin if yu was seein them saim stars & was slim with yu & holdin yore hand & it shore did make me loansome hunny. but pretty soon I got 2 laffin at the mosquitos. in the first plase they had bin livin out there in the rivver bottoms so long that they did not no nuthin about moddern invenshuns & thort that sum dope we had brung along 2 keep them away was sum kind of new hootch. I sprinkled sum of the stuff all over me & set the bottil down on the ground with the stopper out on account of I had lost it & the next mornin it was halff full of mosquitos whitch had got down in there & drowned thereselfs. but the best joke on them was the susprise they wood git when they wood try 2 bite me on the neck. I wood here them cummin up singin & lite on mi neck & then they wood be quiet & git bussy & if yu cood a seen there faces they shore wood a looked susprized because they cood not make no hedway. so then they wood go git a swig of the skeeter dope whitch I had brout along & them whitch did not git drownded in it wood come back & make a lunge at me agin & but there branes out. it was a hole pile of them on both sides of mi piller in the mornin. I wood not undertake 2 estimate how menny mosquitos I was responsible for the anihilation of that nite.

well the next mornin we went in2 town 2 git sum brekfast & then beet it out 2 the oil feelds. well she shore does look difrent in them parts now 2 what they did when I first set them 2 drillin around there back sevral yeres ago, but the old abrams well whitch I lokated is still makin sum oil.

It is a kinder of a seckret hunny what I reely went down there for in the maine because it has 2 do with the possibilities of agin revivin the feeld by extendin her in a direckshun or so. I will hav 2 make mi report on that 2 anuther party & ennyway yu do not need 2 hav yore pretty hed werried about sutch bizness detales. but if they do start anuther boom at west colombia ennytime soon well yu can remember that I told yu so.

I dont no if yu ever herd me talk about mi old frend shorty teegue. well I run into shorty down on the hyde leese & he giv me a ideer bi what he is doin there whitch I am goin 2 present 2 pres. coolidges oil conservashun bord for a good ideer of conservin bi keepin the prise of oil down bi utilizin the sidelines whitch it is possible 2 do around a oil feeld. yu no hunny that the packin industry is ritch because they do not waste nuthin, so shorty has got a ideer along that line whitch has got sum good possibilities whitch the goverment ort 2 no about onli I am a little afred mabe it will git him into trubble with the govt. on account of I do not no if runnin fish hatchries is a monoply with the govt like the post offis or not, but that can be werked out. the propersishun is that he is havin big success in usin his boiler pit for a minny pond. when I cum up he was just finishin givin the minnys the biggest part of his luntch whitch shows yu what kind of a kind harted man old shorty is. he just throws his luntch in the pond & watches the little devils fite for it & then he stands there & tries 2 count them. I judge he has got about four hatfuls but he aint had time 2 name all of them yet. shorty gotten started in the fish raisin bizness kinder bi axcident when the rivver over flowed & left sum minnys in his pit. it dont hert the boiler watter none 2 hav fish in & the feed bill aint verry big & the fireman has plenty of time 2 look after them in his spare time.

well I will close & I am sendin yu anuther letter whitch I hav got from that woman in dalles whitch yu hav not ritten 2 me what 2 say 2 her yet.

yore lovin paul.

Dallis, Texas, July 23, 1925.

Dear Paul—

Yore reply tu my letter has not cum yet and I know its not because yore not trew tu me althow yu write cleo just like yu konsidered me a total stranger. I know yu devlish mens ways an especially yu geeologists who hav a trick of always leevin a loophole to krawl thru. Therefore I feel not to the contrary however reverse.

Dont I use grand grammer?

As regards yore phemale admirreresses, besides me and exkloodin Cleo, dont let em vamp yu paul. Men of yore callibre or gauge are allus in danger of wimmin & especially the wimmin who hav suffered & know what lov meens and dont giv a dern. And dont let them tell yu I'm no widder. I'm 5 widders—2 sod, 2 grass and 1 pen widders. My modesty permits me to tell the blear eyed world thassa recerd in the widderin line.

An I'm trew Paul. My ole man whitch is in the pen will tell yu I've been trew 2 as menny as five men at the same time. Thass also a record on bein trew. when I'm trew I'm trew.

My ole man likes the pen. He writ me that his classmates are reel democratic and all expect to finish their corse before 1927. He got 40 yeres but expects to be home by fall. He calls it the freeman institushun and not the pen. They give pardons insted of diplomas.

My hallitosis is improvin. Since I et sum garlick it is hardly noticable at a distance. From here out garlick is my regular menu. We had a goat got sick with the heet an we was all tryin to dockter it an it got a whiff of me an jumped up an run rite under a frate trane whitch was passin in front of the house. The kids all say mi breth caused it to murder itself.

Well Paul I hav a date with a quart of gin a Scout is bringin me so I'll hav to close an wash my new dress an shave.

Hopin yu an Cleo will bust up an she an slim will marry an that yu cum to see me soon, I remain,

yore trew Odor.

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Wilson
CASING
TONGS
—can be bushed to many sizes
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Adams Combination Cuff and Standing Valve
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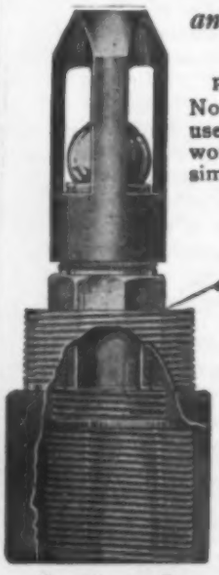
Not necessary to use special cuff on working barrel — simply take a top cuff off of any old barrel and substitute for bottom cuff, then screw hydraulic valve in place.
Made of bronze with steel crown ball and seat.
Has a salvage value.
Sizes 1¾, 2¼, 2¾, 3¼ inches
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Reduce that Rod Trouble with the
HORSEHEAD ATTACHMENT
FOR STANDARD
Ratigan Beam Hanger

Electric Steel Castings
Price Complete, Ready to Install,
$30.00
Linthwaite-Thomson Company
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LOS ANGELES, CALIFORNIA

Start Deep Wildcat Test in Colorado

Brighton, Colo.—New activity was added to operations in the Denver oil district July 15, when the Retter Oil Company of Colorado spudded in the Smith No. 1 in Weld County, a few miles east of the Boulder oil and gas field.

Preparations have been made by this company to put down one of the deepest tests ever drilled in this section of the country, provided such depth is necessary to strike pay, operators state. The entire equipment for drilling operations is new.

Operations were started in the Pierre shale with a 20-inch hole. The exact thickness of this structure is not known in this county. Until certain structures known in this territory are logged, the operators will be unable to determine the depth of the Dakota, which is believed to be the pay formation.

California Concern Opens Venezuelan Branch Office

On account of increased activity in operations in the Venezuela fields, the Regan Forge and Engineering Company is sending a representative to that country to take charge of its interests. Ben H. Johnson, who resided in Venezuela for many years serving as drilling superintendent, is leaving the latter part of July for the southern country, via New York. Before leaving New York he will confer with Mr. William Braat, New York representative, regarding foreign business. Jack Becker, of the Becker Specialty Company, representing Regan Forge and Engineering Company in the Mid-Continent field, has been spending a month in Los Angeles and is returning to Tulsa to lay plans for aggressively covering the Mid-Continent territory, featuring Regan products. It is the plan of the Regan organization to carry products in stock in Tulsa, according to Mr. Joseph Regan.

Baker Casing Shoe Company Enlarges Taft Store

Taft, Calif.—The Baker Casing Shoe Company has for years carried a stock at Taft, but recently arrangements have been made with George J. Hausen for more space to increase the stock to make it absolutely complete. Mr. Hausen recently took over the old Fairbanks-Morse warehouse at Taft, remodeled it and made it more suitable to oil field supply needs. Mr. Hausen handles the Baker casing goods, but R. C. Baker, Jr., continues to make the fields in the Taft vicinity for the Baker Casing Shoe Company

SPEED—

In oil-well construction—Time means Money—Speed is many times essential and in most instances desirable.

O. K. Super oil-well cement obtains practically its full strength in (72) hours without the use of chemicals to secure early hardening.

OK CEMENT

Oklahoma Portland Cement Company

Sales Offices:

OKLAHOMA CITY **TULSA**

6007 FEET

This is the depth of a test well recently completed in India with the

Sullivan "FK" Diamond Drill

This was a "rescue job." Cable and Rotary "combination" reached its limit at 4400 feet. The Sullivan Drill bored the hole 1607 feet deeper and was stopped only because the necessary information had been secured. The cores gave a complete geological record.

DEPEND ON SULLIVAN DIAMOND DRILLS!

Catalogue 4280-0

SULLIVAN MACHINERY COMPANY

122 So. Michigan Ave., Chicago

Dallas Garber Tulsa Los Angeles London

DRIVE Your Rotaries, Mud Hogs, Powers, Short Pipeline Pumps, Lighting Generators, Electric Drilling and Pumping Motors, also Cable Drilling Machines, with

CLIMAX *Trade Mark Reg. U. S. Pat. Off.*

"Trustworthy" Engines

—for gasoline power. 15% less with natural gas.
Lightest Heavy-Duty Engine made—Price is Right.

Built in
50-55 H.P. Size
70-80 H.P. Size
105-120 H. P. Size

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Mid-Continent Office: Wells Hotel, Tulsa, Okla.

EXPERT WELL SHOOTING

Our shooters all are experienced, careful and expert men. Their time spent in this service averages more than fifteen years so they had to be right. Remember this when you order that next shot.

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Breckenridge	Gorman	Bartlesville	Drumright	Tonkawa	Eureka
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THE EASTERN TORPEDO OF OHIO CO.

Many Types of Power Used in Oil Production

(Continued from page 29)

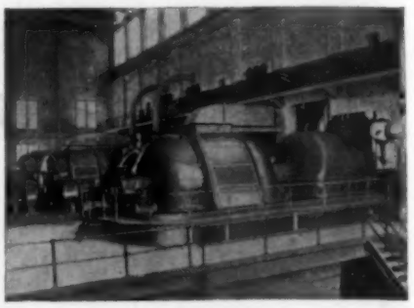

Figure 6
Modern central electric power station. Three 10,000 kilowatt turbo-generators. Condensers underneath; boiler plant in separate building.

or $30.00 per horsepower; of transmission lines, per main line mile, $1800.00; of transformers, $10.00 per kilowatt hour or $7.00 per horsepower, and of the motors in the two speed alternating current type, maximum rating, $30.00 per horsepower, installed, making a total capital cost of $160.00 per horsepower, including step up and step down transformers, but no lines. The line cost varies so much that an amount of $15.00 per horsepower is arbitrarily added, making the total cost per horsepower, from fuel oil to the driving belt, $175.00.

The economy of the best central stations today is approximately one kilowatt hour per pound of fuel at the station, and sending the power through a step up transformer, over a transmission line, through the substation, then through the transmission line again, and through step down transformer, and through the motor to the belt, the loss would be about twenty per cent.

The central station has the advantage, however, in that the load factor is not 100 per cent. For instance, if there were connected to a central station, say 15,000 horsepower in motors, doing all kinds of work, such as pumping wells, pumping water, running shops, operating drilling rigs, and furnishing illumination, there would be approximately two-thirds of this load only on the station continuously, and the station would therefore be built for only two-thirds of the connected load and during the peak, the station would be designed to carry an overload for an hour or so. The load factor varies, however, from one station to another, depending upon the service furnished.

There is so much to be considered as the basis of power rate making that this paper would lead off into other fields. Suffice however, to say that a central power station company must obtain a load and a rate that will pay for fuel, water, pay rolls, repairs and renewals, interest charges, depreciation, amortization, taxes and insurance, and show a profit to the stockholders, and lower than this, the rates should not go.

Power rates are made up with the idea of securing a 100 per cent load

factor; loads that continue throughout the 24 hour day and throughout the year can be powered more economically than intermittent loads and the continuous loads, therefore, receive a lower power rate.

There is also a demand charge, in what is termed the three part rate making basis, in which each connected horsepower must pay a fixed monthly charge, plus power consumption.

Any prime mover, by whomsoever purchased and installed, must pay for itself sooner or later, or that prime mover shows a loss; the charges against this prime mover, as we have seen in the case of the central station, are numerous. Those charges that continue whether the power is used or not, that go against a prime mover, are those of a fixed nature, consisting of interest charges, depreciation, amortization, insurance, taxes; while operating charges are fuel, water, pay rolls and similar charges, including repairs and renewals.

Where a power unit is not used continuously it then follows that fuel may not be a major item, but the remaining items may become major costs. It follows further, then, that the most economical prime mover insofar as fuel is concerned, may not be the most economical power producer.

If a power plant, however large or small, operates only six months out of twelve, the fuel, water and a few other charges may be halved; in this case, the capital cost of the power plant may be reduced by selecting a prime mover not so economical in fuel, but that, by reason of its lower cost and installation, has lower fixed charges; the idea being to reduce the capital investment and thereby reduce fixed charges, and although fuel consumption may rise somewhat, the cost per power unit of quantity may be less.

Also, no central power station can be built profitably to carry the entire initial load of a field being drilled.

Take one field, any field, as an example, and say that field was drilled with rotary, and casing set, and then drilled in with cable tools, as many are done today.

Assume two hundred rotary drilling rigs in operation, followed by an equal number of drilling in and swabbing strings, and assume eight hundred wells to the field. This might be Tonkawa and again it might be Powell.

The two hundred rigs in operation would show a load factor of two-thirds and, with a 75 horsepower motor driving the draw works and rotary and a 50 horsepower motor driving the pumps, the total load connected would be 25,000, and with two-thirds load factor, 18,750 horsepower in the station would be required, plus enough to offset transmission and transformation losses. Then add the same number of standard rigs, with 50 horsepower per rig, and the total is about 25,000 horsepower required of the central station.

Then, when the eight hundred wells

ENGINEERS & CONTRACTORS IN NATURAL GAS AND OIL

A construction contract placed with the Hope Company, in its special field of activity, carries with it a dependable insurance against delay, loss and disappointment.

The Hope organization has "the habit of succeeding" under all conditions. It has never yet failed to make delivery of completed work, on time and right.

The record of the Hope Company as engineers and contractors in the oil and gas industries, is a guarantee of what may be expected from Hope Service by those with problems still to be solved.

HOPE SERVICE

Engineering counsel, design, construction and contracting—in pipe lines for oil and gas, oil pumping stations, gas compressing and boosting plants, gasoline recovery systems, city and intercity gas mains.

UNIT RESPONSIBILITY

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HOPE Engineering & Supply COMPANY

DESIGNERS MANUFACTURERS

MT. VERNON, OHIO, U. S. A.

SOME FIGURES DON'T LIE

Ordinary tanks are made of 14 and 16 gauge black steel.

M & V Welded Tanks are made of 10 and 12 gauge copper steel, 40% to 80% heavier.

And they are welded construction, just naturally can't be leakers after they have been tested to five pounds air pressure.

They are strongly re-inforced and splendidly equipped with improved thief hole cover, removable clean-out plate and our fool-proof vacuum and pressure valve.

FOR FULL INFORMATION AND PRICES WRITE

M & V TANK COMPANY

"Conservation Tankage"

WICHITA FALLS, TEXAS

SAVE THE Lighter FRACTIONS

Evaporation skims the lighter gasoline-content vapors from the top of oil like cream is skimmed from milk. After these highly impregnated gases are carried off, the gravity is materially reduced in the oil that remains.

Ordinary tanks not only allow evaporation to reduce the quantity of your oil but allow the quality to be lowered also.

Maloney Tanks successfully eliminate evaporation due to patented crimp offset at seams and joints, reinforced deck and bottom construction and gas-tight thief hatches.

"Alone in Quality"

MADE OF KEYSTONE COPPER STEEL

MALONEY TANK MFG. CO.

Tulsa, Oklahoma

MADE OF KEYSTONE COPPER STEEL

We now furnish "Buck" type vacuum-pressure valves and vacuum breakers

12 to 3,000 Bbls. Capacity

Prompt, Dependable Expert Service

MALONEY

are in operation, the average well would consume say ten horsepower for pumping, and there would be many wells off, for cleaning or rod pulling and so on, and this will be taken off at two hundred, leaving 600 wells on the beam continuously.

These six hundred wells would require six thousand horsepower, plus motors used for cleanout and rod pulling, or say eight thousand horsepower total.

If the station had been built for 25,000 horsepower, used for drilling, when the field subsided, there would be much idle equipment entering into the little matter of power rate making.

For this reason, it does not seem that electric power stations can compete successfully with steam and gas engines for drilling a field, although, after the field is drilled, electric power has many advantages to offset the additional cost of power.

Of course, where there is a net work of high tension power lines, interconnecting generating stations, that may be connected to the field and these stations overloaded during the drilling period, some of the drilling may be taken care of without much additional capital investment at that time.

In the case of California, where power goes over the dam unless it is sold, there is more competition insofar as rate making is concerned, and power rates are therefore lower. California, however, represents a minority in this respect, and, during the water shortage of last year, many electrical power connections were discontinued for want of water power.

This paper is trying to cover the general power situation; the situation in California is not general.

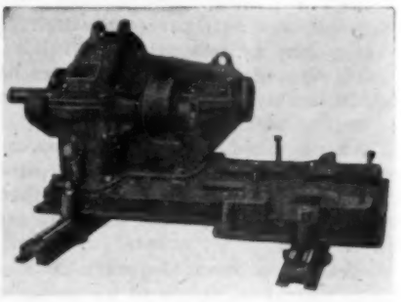

Figure 7
Speed reduction gear with sliding base to maintain driving belt tight. Motor or multi-cylinder engine is bolted to base

The reduction gear, shown in Figure No. 7 shows a reduction gear, with herringbone gears running in oil, designed for operating a standard pumping rig. The electric motor may be connected to the driving shaft, and the reduced speed driven shaft then belted to the bandwheel. Electric power applications have made this mechanism necessary and the careful design makes this type operate continuously. Since the electric motor may be reversed by changing poles, no other reversing mechanism is necessary.

There has recently come into the

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Problems Studied in Making American Quality Tanks

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(2) Design and construction of Bolted Tanks.

(3) Practical and convenient tank fittings and appliances.

(4) Comparative strength of Welded, Riveted and Bolted Construction.

(5) When to use a Welded, a Riveted, a Bolted or a Wood tank.

(6) Effective means of preventing evaporation.

(6-a) Comparative effectiveness of Welded, Riveted, Bolted and Wood tanks in conservation of oil.

(6-b) Effect of pressure in tanks as means of conservation.

(6-c) Color of paint to use on tanks.

(7) Comparison of fire hazard with Welded, Riveted, Bolted and Wood tanks.

(8) Comparative cost of Welded, Riveted, Bolted and Wood tanks.

Our Engineers have assembled, in booklet form, data obtained from oil companies and other recognized authorities, answering in detail the above problems.

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PROBLEM NO. 6

Effective means of preventing evaporation.

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Products that cut down your underground overhead

field, the multi-cylinder gas engine in a moderately heavy duty type, that is, heavy duty for this type of prime mover, which is finding much success for drilling, pumping and other field power applications. Figure 8 shows a four cylinder 6¼-inch bore by 8-inch stroke, developing a maximum of 100 horse power.

The weight of these prime movers is about 25 pounds per horsepower for the net engine; very little foundation is required—timbers may be used—for the engine is self contained. The cost of these engines ranges about $15.00 per horsepower for the engine, ready

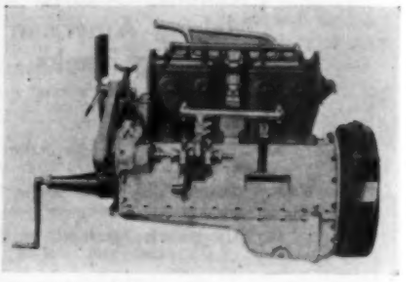


Figure 8
Four Cylinder Gas Engine

to run; the fuel consumption of natural gas runs approximately 12 cubic feet per horsepower per hour.

These engines are governor controlled, have friction clutches, high tension ignition, and will operate on gasoline also.

Because of the higher speed of this type of engine, a reduction gear of some kind, to suit the service, is necessary. For pumping, the same reduction gear shown in Figure No. 6 with a reverse added, may be used.

The most expensive power insofar as fuel is concerned, is that from a duplex steam pump.

Because there is not expansional effect in the steam cylinders, this pumping engine takes in steam at boiler pressure, less wire drawing, during the whole length of stroke, hence the term direct acting pumps. The quantity of steam required is about 150 pounds per horse power hour. An example: a

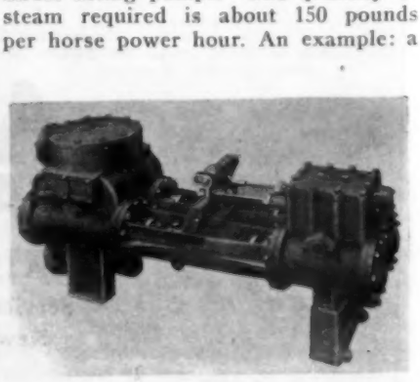


Figure 10
Duplex Steam Pump

10"x6"x12" duplex double acting drilling pump, delivering 250 gallons per minute at 150 pounds pressure at the manifold. The water horsepower is 22. With a mechanical efficiency of 75 per cent, the power delivered by the pistons is 31. And, at 150 pounds steam per horsepower hour, the steam consumption is 4650 pounds per hour, requiring a minimum of 465 pounds of fuel oil per hour, operated continuously. This pump is economical only when the exhaust steam is used for heating feedwater or for other heating.

The same fuel, used in an internal combustion engine, would develop six or seven hundred horsepower hours; the same work done, viz., 31 horsepower, with an internal combustion engine would require only 16 pounds of fuel.

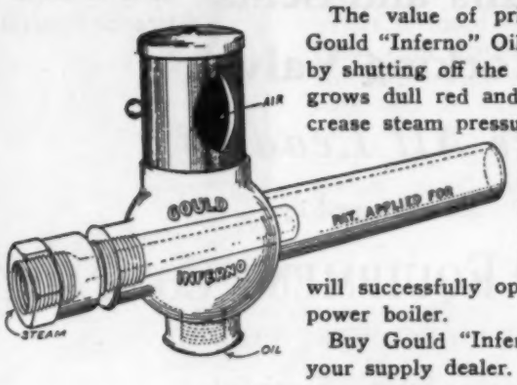
For every power application, there is one best type of prime mover; one type that will show the lowest power cost, every item of cost being considered. It might be then in one installation, like a main line pumping station, only the most elaborate plants will show the best economy, while a beam well would show up best with a multi-cylinder gas engine and a temporary pumping station might show up best with a boiler and a duplex steam pump.

The field is not well posted on the actual power consumption for various purposes; while a 50 horsepower engine may be required for doing a certain work, still that engine may run at a 40 per cent load factor, and, while a boiler may be rated at only 50 horsepower, it might be developing full 100 continuously. But, a close classification of operations of kindred nature discloses the annual power consumption, within close figures, and such studies are very profitable as a guide in selecting prime movers for certain purposes.

Petroleum Division A. S. M. E. Meets in Casper in August

Casper, Wyo.—The petroleum division of the American Institute of Mining and Metallurgical Engineers will be held in Casper, August 28 and 29. The national convention of the entire organization will be held in Salt Lake City, August 31 to September 3, inclusive. Elaborate plans for the entertainment of the petroleum division have been made by the members who reside in Casper. E. L. Estabrook of the Midwest Refining Company is vice chairman of the division, and J. C. Lindsay is chairman of the Rocky Mountain division of the organization. Mr. Lindsay will be actively in charge of the meeting which is to be held in Casper. Members of the petroleum division will be given every chance to see the leading oil fields and refineries of the state before going to Salt Lake City.

LESS STEAM PRESSURE REQUIRED TO OPERATE THE GOULD "INFERNO" OIL BURNER



The value of primary air used in the Gould "Inferno" Oil Burner can be proven by shutting off the air. The flame at once grows dull red and it is necessary to increase steam pressure to only partly clear up the flame. Open the air vent again and the flame clears up and the heat increases. One Gould "Inferno" will successfully operate a seventy horsepower boiler.

Buy Gould "Inferno" Oil Burners from your supply dealer.

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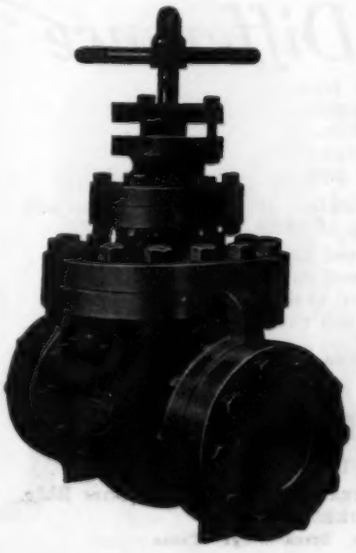

No Ludlow Valve is ever shipped from our factory until it has been tested and we have satisfied ourselves that it is OK in every respect.

If you are not already using these dependable LUDLOW DOUBLE GATE VALVES we would like to tell you more about them.

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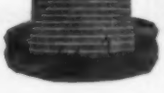

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We buy abandoned pipe lines and oil wells. If you have any to sell, communicate with us before you dispose of them.

950 ft. 15½" 70 lb. Used casing.
1400 ft 12½" 50 lb. Used casing.
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Above casing located in Perryton, Texas, near the Amarillo oil field.

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More Than Half of Mexican Wells Failures

Tampico, Tamps.—During the first six months of 1925, 443 wells were drilled in the Tampico district, with 160 of that number being commercial successes for an estimated initial production of 386,100 barrels. Of this number 307 were drilled in the heavy oil district, with 143 successful completions for an initial production of 307,100 barrels, together with 167 dry holes, 59 salt water wells, and the balance either non-commercial or abandoned for various reasons.

In the Southern or light oil district, 17 of the completions were good for 79,000 barrels initial production, together with nine dry holes, 15 salt water wells, three abandoned or junked holes, and one gasser. Twenty of the total number of wells drilled in this district were by the Huasteca Petroleum Company, light oil subsidiary of the Pan-American Eastern, which had eight successful completions, against three dry holes; eight salt water wells, and the gasser in question. The completions were good for an estimated initial production of 75,100 barrels, of which 62,000 barrels was from wells in Tierra Blanca, where well No. 44 is a 50,000-barrel producer. This well, together with Cerro Azul No. 5, for 10,000 barrels, were the only large producers completed in the light oil field during the six months' period. Completions of all other companies outside of the Huasteca Petroleum Company, 25 in number, were good for but an estimated initial production of 3900 barrels.

In the heavy oil district the Pan-American Eastern interests, under the name of the Mexican Petroleum Corporation, drilled 28 wells, of which 12 were dry holes and nine producers, for 43,675 barrels initial production. Of this amount 20,000 barrels came from San Pedro No. 5, which, however, went to salt within a few days after withdrawals were started, and 6000 barrels in Chijol 6, today considered one of the best wells in the Panuco region.

Mexican Seaboard Leads

The Mexican Seaboard Oil Company led all others in the amount of drilling with 68 completions, of which 27 were producers for 94,350 barrels, all in Hacienda Cacalilao, with the exception of a 50-barrel well in Las Piedras. The company completed but two wells in the light oil district during the period in question a wildcat duster in Santa Amalia and a salt water well in Toteco. Among its drillings were two wildcat wells in Naranjo, San Luis Potosi, in both of which considerable gas and a small quantity of oil were encountered. In addition to its drilling in the Tampico district, the Mexican Seaboard is the only company in the republic, with

the exception of the Mexican Eagle, doing any work in other parts of the country, with operations going on at two widely separated points in the State of Chiapas and five wells drilling at San Carlos, Veracruz, on the Isthmus of Tehuantepec.

The Transcontinental Petroleum Company (Standard of New Jersey), next to the Mexican Seaboard and the Pan American Eastern, was the most active operator, having drilled 55 wells from January 1 to June 30, of which 14 were producers for an estimated initial production of 42,510 barrels, with the production coming from either Cacalilao or Hacienda Paciencia, which the Standard subsidiary is operating on a 50 per cent basis for the Penn Mex Fuel Company.

The Royal Dutch Shell's Mexican subsidiary, Cia. Mexicana-Holandesa "La Corona," S. A., was the next in the point of activity with 44 wells, of which 15 were producers for 18,820 barrels. Followed by the Mexican Gulf, which drilled 41 wells, of which 14 were producers for 14,810 barrels initial production, most of this came from Corcovado, with success coming only after the Gulf had drilled 17 dry holes on the property.

In Cacalilao

The Sinclair continued comparatively active in Cacalilao on property it has been operating for the Empire Gas & Fuel Company for the last several years, but out of 16 wells drilled, but three were commercial successes for only 1850 barrels initial production. On its own account, however, the Sinclair was much more successful, getting nice producers out of 15 attempts, for 12,340 barrels. One well, a 5000-barrel producer in Garrucho, failed to stand up, however, while well No. 5, Tananturo, estimated as good for 5000 barrels a day on completion and opening up a new pool, has averaged 7000 barrels daily production since turned into the flowline. This by far is now the best well of the Sinclair in the republic.

The Cosmos Oil Company, independent operator, was extremely active, drilling 15 wells, practically all of which were located in Corcovado, where at the present time this company, through the individual drillers to whom it has allotted drilling plots, is carrying on a drilling program of 25 wells.

The Marland Oil Company, for the first time since it started operating in Mexico, and after having drilled 21 wells in Hacienda Limon, has apparently found the proper section of the property, with the result that two of the five wells drilled in May are considered as being good for 8000 barrels daily. This production, however, is closed in pending the construction of storage, pumping and pipe-line facilities.

The National Railways of Mexico

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Outlines of the Occurrence and Geology of Petroleum

An Introductory Handbook

By I. A. STIGAND, M.A., F.G.S.

As the title suggests, this handbook is elementary in character, and the main object is to furnish an outline of the general features concerning the occurrence and geology of petroleum or bitumen, in a condensed manner, and with especial reference to practical interest; in the hope that it may serve as an introduction to those desiring to become acquainted with the subject (or students in oil-geology), and that it may also be of some interest to the large class who are concerned in its economic or commercial aspects.

The discussion is limited to the more pertinent theoretical questions and practical considerations, or the general topics of interest; and, where possible, is illustrated by reference to known examples in the field. The materials and the views expressed are founded on personal observations and studies made in various regions during two decades.

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34 Illustrations. 246 Pages. 12mo. $4.50

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1716 Dallas Avenue, Houston, Texas

has had no great success in its campaign along its right of way to find sufficient production for its fuel needs. Of its 12 wells drilled, four were brought in for 7150 barrels, which, however, have failed to hold up, and the company is purchasing an average of 10,000 barrels daily from the Mexican Petroleum Corporation at Ebano.

Almost one-third of all activity during the period in question took place either in Haciendas Cacalilao or Corcovado. In the former, 78 wells were drilled, of which 17 were successful for 50,500 barrels, while of the 53 wells drilled in Corcovado, but nine were successful for 18,300 barrels.

The following table shows all wells drilled, according to results, together with total estimated initial production:

Company—	*1	2	3	4	5	6	7
Mexican Seaboard.	0	5	34	12	27	68	94,350
Pan Am. Eastern.	2	1	19	14	22	58	121,775
Transcontinental .	1	1	25	12	14	53	42,150
Dutch Shell	0	1	14	14	15	44	18,820
Mexican Gulf	0	0	26	1	14	41	14,810
Sinclair - Empire.	0	2	8	3	3	16	1,850
Sinclair	0	0	5	1	9	15	12,340
Cosmos	0	2	10	1	2	15	5,500
Southern Pacific ..0	1	4	1	6	12	5,555
National Railways.	0	1	6	1	4	12	7,150
Texas	1	0	0	2	4	7	1,565
Mexican Eagle ...	0	0	0	2	4	6	2,200
Marland	0	1	1	1	2	5	8,000
Pierce	0	1	1	0	1	3	30
Miscellaneous . ..	4	9	23	9	43	88	49,545
Totals	8	25	176	74	160	443	386,100

Note: *1—junked or abandoned; 2—non-commercial; 3—dry; 4—salt water; 5—producers; 6—total wells; 7—barrels.

Simms Company Enters Refining and Marketing

Dallas, Texas.—The Simms Oil Company, prominent independent producers in the Mid-Continent district, has become actively engaged in the refining and marketing business in its own name through the absorption of the Clayton Oil & Refining Company and the Clayco Gasoline Company, which were purchased by Simms June 10 for a consideration amounting to approximately $1,250,000. In connection with the purchase the Simms Oil Company acquired a modern refinery at West Dallas, equipped to handle 4500 barrels of crude daily in topping stills; four Cross cracking units aggregating 3200 barrels daily capacity; nine retail gasoline stations in Dallas; and all crude and refined contracts in effect at the time of the consummation of the deal.

The office force of the newly acquired companies has been merged with the Simms offices in the Magnolia Building in Dallas, where headquarters are maintained, with Edward T. Moore, president, in charge.

The Simms Oil Company has adopted a trade name of "Simms Gas" for its motor fuels, and is using a uniform color scheme for its tank wagons, bulk and filling stations, and tanks, while considerable improvement is under way at the West Dallas plant, which is operating on high gravity crudes produced and purchased by Simms in the North Texas fields.

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is a problem in CHEMISTRY

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12,000 acres University Permits, PECOS COUNTY, Dated Oct. 1, 1924, 5 years. The new law makes these permits most attractive. Can be subdivided into 40 acre tracts. Near Sun, Gulf, Dixie, California Company, Phillips, Arkansas Fuel, Humble holdings.

10,000 acres CROCKETT COUNTY. Large and small blocks; adjoining big companies; scattered wildcat. Also close-in adjoining World well block.

20,000 acres 10 year leases; low rentals; TERRELL COUNTY. Getting good play. Watch this county! Prices right.

5 000 acres Upton County. Scattered tracts, blocks for drilling.

60,000 acres one block—southeast PECOS COUNTY—on geological formation. Most attractive as to desirability, price and terms.

2,000 acres IRION COUNTY. 10 year lease; watch the new work here.

12,000 acres LOVING COUNTY. 10 year lease 10 cent rental. Right in line.

Write for prices and maps. Will allow time for geological inspection.

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SQUEAKS FROM THE BULL WHEEL

Silver Horseshoes!

"To hell with the ice business!"

It was Jim Betchel speaking. For a dozen years he had owned and operated the ice plant at Braman, Okla. Then on one of the hottest days of the year he shut down the plant, expressed his sentiments, and quit.

You see, Betchel owns the 30 acres on which the Comar Oil Company completed a 5000-barrel well. His royalty for that day was $1905.

Once he offered to sell half his royalty for $125.

"Did you get the number of the car that hit you?" asked the traffic cop.

"Look on my back officer," replied the victim weakly. "I think you'll find it stamped there."

Charming Customer: "Is this butter fresh?"

Clerk: "Miss, if it was any fresher I wouldn't let you take it home."

"Why is it that a red-headed woman always marries a very meek man?"

"She doesn't. He gets that way afterwards."

She: "Do you think my mouth's pretty?"

He: "The prettiest in the world dear; but I'm willing to put mine against it."

Waiter—Yes, sir, we're very up to date. Everything here is cooked by electricity.

Diner—I wonder if you would mind giving this steak another shock?

Lecturer (speaking at girls' college on evils of smoking): Now are there any questions on the subject you would like to ask?

Voice from back of room: Yes; how do you blow rings through your nose?

Jimmy carried the following excuse to the teacher the next morning: "Please excuse Jimmie from being absent. He had a new baby brother. It was not his fault."

He—Don't you think this "full dress" is a perfect fit?

She—Yes, it's almost a convulsion!

Pleasant For Him

Sweet Young Thing (coming in with attentive partner from room where a hard bridge match has been in progress)—"Oh, mother, I've just captured the booby!"

Mother—"Well, well! Come here and kiss me, both of you."

Another Success

"Did the patient survive that dangerous operation?"

"Splendidly; more than two hours."

One What?

Stranger (winking): "Can you direct me to a good drugstore?"

Villager—"You're talking to one right now."

Played by Pop

First Little Girl—"Do you believe there's a devil?"

Second Ditto—"No! It's like Santa Claus. It's your father."

Up to Her

Nervous Woman (to persistent beggar)—"If I give you a piece of pudding, you'll never return, will you?"

Beggar—"Well, lady, you know your pudding better than I do."

"Good heavens! Who gave you that black eye?"

"A bridegroom—for kissing the bride after the ceremony."

"But surely she didn't object to that ancient custom?"

"No—but it was two years after the ceremony."

Junior: Ma! will the ten commandments hurt anyone?

Mother: Certainly not, son.

Junior: Well, that's all right, then. Baby just ate the ones teacher gave me yesterday.

Little Boy in Monkey House at Zoo: "Look, Maw, there's a boomerang!"

Mother: "That's not a boomerang, son; that's a bamboo!"

Woman Customer: "I want to get a corset, to put on around the house."

Absent-minded Clerk: "How large is your house?"

She: "How is it that widows generally manage to marry again?"

He: "Because dead men tell no tales."

The Horsefly Driller

(Reprinted by Request)

The horse fly's fortune was on the wane,
His tools were stuck and a flood of rain
Had tied him up to his neck in mire
And he couldn't get clear for love or hire.

So he junked the hole and cussed his luck,
For the forces of nature he had to buck
Had shown him the cards stacked in the deck
And he longed again for the old cow's neck.

With credit low and a third-hand rig
He lined her up and began to dig
On a lean old sow, in a smelly bog,
With "bacon rind" to start his log.

He jiggered his pole like he used to do,
But to save his life he couldn't get through.
"This life is hell," was the Horse Fly's plaint,
Then the old sow grunted and fell in a faint.

The Laboratory Never Lies

A cautious individual, who had received a gift of some home brew from a friend, decided that he would have it analyzed before he tried it. He sent a pint to a commercial laboratory, with a request for an analysis, and in a few days received the following letter:

"Dear Sir:

"We have received the specimen which you forwarded to us on the 17th instant, and as a result of our examination regret to inform you that your horse has diabetes." — Bull. Albany Co. (N. Y.) Med. Soc.

"My dear young lady," said Dave Bird in grieved tones, as he listened to an extremely modern girl tear off some of the very latest jazz on the piano, "have you ever heard the Ten Commandments?"

Flapper: "Whistle a few bars. I think I can follow you." —Gas.

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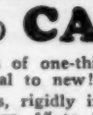

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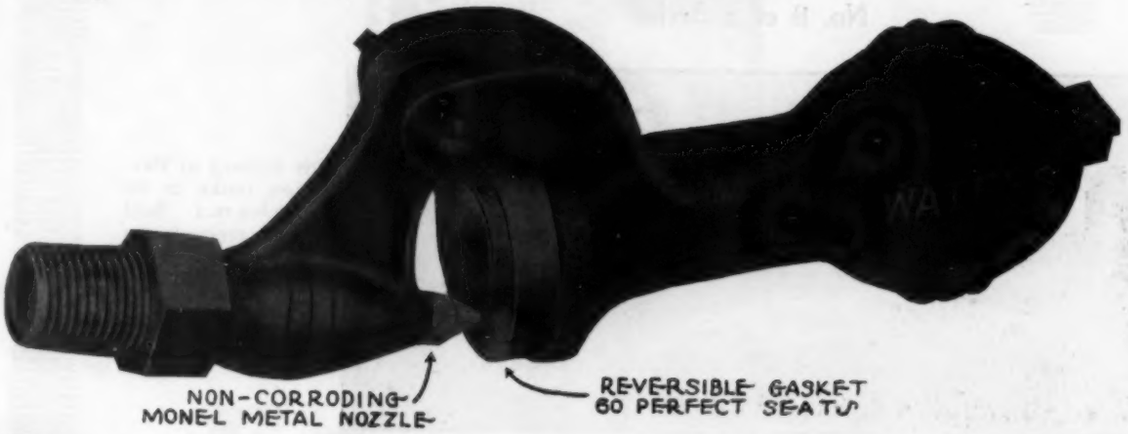

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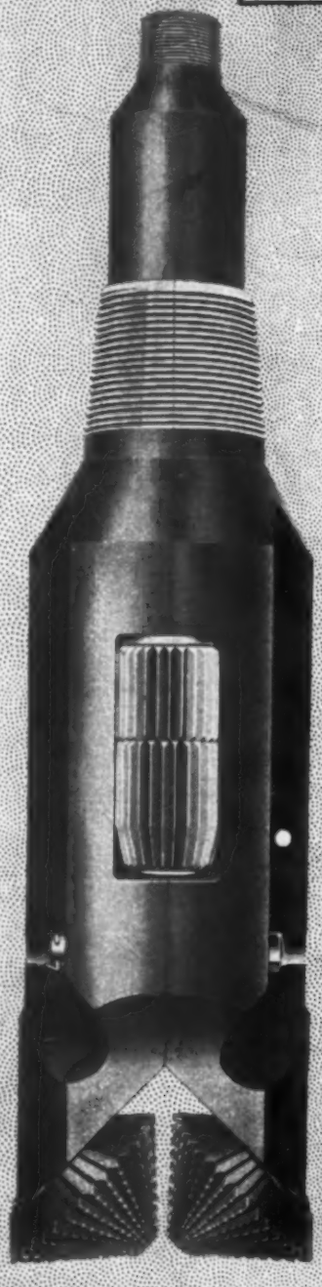

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